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TRANSACTIONS

OF THE

SOCIETY OF BIBLICAL ARCHÆOLOGY.

VOL. III. JUNE, 1874. PART 1.

SYNCHRONOUS HISTORY

OF THE REIGNS OF

TIGLATH-PILESER ..	AND ..	AZARIAH.
SHALMANEZER ..	„ ..	JOTHAM.
SARGON	„ ..	AHAZ.
SENNACHERIB ..	„ ..	HEZEKIAH.

From B.C 745 to 688.

BY J. W. BOSANQUET, F.R.A.S., *Treasurer.*

Read 5th May, 1874.

IN continuation of the subject of my last essay on "the date of the Fall of Nineveh" (vol. ii, p. 147), in which I pointed out how both history and astronomy demand that the common reckoning of the reigns of the kings of Judah should be lowered throughout to the extent of 25 years, thus reducing the date of the first year of Uzziah, or

				Old Date.		New Date.
Azariah, who reigned	52 years,	from	B.C.	810	to B.C.	785
Jotham	„ 16 „	„		758	„	734
Ahaz	„ 16 „	„		742	„	718
Hezekiah	„ 29 „	„		726	„	702.

I now propose to examine the various contemporary records and published inscriptions, cuneiform or otherwise, which bear upon the period between B.C. 745 and 688: and to show how, by adherence to the principle of accepting

the evidence before us as it is written, and not too readily allowing the idea of corruption in the text to interpose, it will be found that Assyrian and Hebrew records are agreed, when the reigns of the kings of Judah are lowered to the extent of 25 years, as proposed: and how, on the other hand, Assyrian monumental evidence is wholly irreconcilable with the Hebrew records when arranged according to the common reckoning.

In all cases of intricate inquiry, where the theory of interpretation has to be tested by facts, we are all aware how great is the tendency, on the occurrence of difficulties, to tamper with the evidence rather than to abandon the theory: and this common frailty of criticism has been exhibited to extreme excess in connexion with the particular period under inquiry. For instance, Assyrian records attest, as we have seen, that Menahem, king of Samaria, who only reigned ten years, became tributary to Tiglath-Pileser about the eighth year of that king's reign, B.C. 738, when according to the common reckoning Menahem had been dead just 24 years. To any reasonable inquirer this might appear to be a stumbling block in the way of the received opinion. On the contrary, however, it is supposed to be easily removed by the simple suggestion that the Assyrian scribe was ill informed, and that he has written ignorantly, on the tablet containing the list of tributary kings who did homage to Tiglath-Pileser, the name of Menahem instead of Pekah, one of his successors.

Again, the manifest tendency of the Assyrian Canon or list of archons throughout, is to lower the current history of the kings of Syria and Palestine between 20 and 30 years, which should be inconvenient and perplexing one might suppose to the upholders of the common reckoning. Not so, however: for the late Dr. Hincks[1] and Dr. Oppert,[2] no mean critics, have not scrupled to accuse the Assyrian scribe of blundering to that exact extent which will suit each of their theories, by the omission of from thirty to forty names from the consecutive list of eponymous archons of Assyria.

[1] Journal of Sacred Literature, January, 1863. "The compiler of the Canon was a blunderer."

[2] Revue Archéologique, December, 1868, p. 387.

Again, the prophet Isaiah, who wrote as an eye-witness the events of his own days, and whose words are adopted by the writer of the Book of Kings, has related that Sennacherib king of Assyria came up against Jerusalem in the 14th year of Hezekiah's reign, that is in the year B.C. 713, according to the received reckoning: while the Assyrian Canon attests that Sennacherib had not even been associated on the throne till some years after that date, that is till B.C. 705. This decisive contradiction to the common theory it is proposed to remove, simply by assuming corruption in the Hebrew text, and by substituting in Isaiah and the Book of Kings the 28th instead of the 14th year of Hezekiah.

Lastly, the most able interpreters of Assyrian inscriptions, taking for granted the correctness of the ordinary dates, and yet unable to find room for the reign of Jotham king of Judah, when arranging the evidence of the inscriptions in connexion with those dates,—though Jotham according to native history reigned not less than sixteen years between Azariah and Ahaz,—have been compelled to assume corruption in the Hebrew text, and either double the reign of Jotham over that of Uzziah and Ahaz, or eject it wholly from the list of kings. The only just conclusion to be derived from this continuous necessity for setting aside the evidence, in order to maintain the system is, that the system as it stands is untenable and worthless. Fortunately this inevitable conclusion is not to be deplored, but greatly to be rejoiced at. For it is in consequence chiefly of this false arrangement of Scripture chronology that some of the most instructive and important parts of Sacred Scripture have been pronounced by eminent critics to be spurious and unhistorical.

Mr. George Smith, in a recent publication in these Transactions (vol. ii, p. 324), has admitted the necessity for lowering the current dates to the extent of ten years as regard the death of Pekah king of Samaria, and pronounces with much emphasis—"I cannot doubt for one instant that the accession of Hoshea king of Israel" (who slew Pekah) "was about the year B.C. 729," instead of 739, which is the common date. He does not however refer to the Assyrian authority for this assertion. We still differ therefore to the extent of fifteen years—and if my interpretation of the records is

correct, the death of Pekah will have yet to be lowered from B.C. 729 to 716, as I shall presently show.

There is no question amongst Assyriologists, including Mr. Smith, that according to monumental testimony Menahem king of Samaria paid tribute to Tiglath-Pileser, in that king's eighth year, B.C. 738; which year was concurrent with the 49th year of Azariah, B.C. 738,[1] according to the new reckoning: nor that Sennacherib in his third campaign, in B.C. 701, imposed tribute upon Hezekiah when he came against Jerusalem in that year. Now between 738 and 701 there is an interval of just thirty-seven years: and according to the Book of Kings, thirty-seven years counted from the 49th year of Azariah lead down to the second year of Hezekiah, in which second year therefore we ought to find in the Hebrew annals that Jerusalem had been attacked by Sennacherib. Now I have already pointed out elsewhere[2] that the Second Book of Chronicles (ch. xxix, xxx, xxxi) relates with much minuteness all that Hezekiah did in the first year of his reign, B.C. 702 according to the new reckoning, that is in the "first month," in the "second month," the "third month," and on to the "seventh month" of that year: and how ch. xxxii begins thus—"After these things and the establishment thereof, Sennacherib king of Assyria came and entered into Judah, and encamped against the fenced cities, and thought to win them to himself," that is to say, in Hezekiah's second year, B.C. 701. I have also pointed out that the description given in Chronicles of the determined resistance of Hezekiah at that time, and of his building up "the wall that was broken," and of the raising of the wall "up to the towers, and another wall without," well agrees with what Sennacherib himself describes in his

[1] "Depuis fort longtemps, on connait un passage d'une texte de Teglathphalasar, verifié par deux examplaires, que, dans sa huitième anné, il recut les tributesde Menachem de Samarie."—Oppert, Revue Archéologique, Dec., 1868, p. 384.

Sir Henry Rawlinson also remarks that this tribute from Menahem to the king of Assyria "is assigned to his eighth regnal year in a most important fragment of an inscription found in the south-west palace at Nimrud."—Outlines of Assyrian History, p. xxvi, 1852.

Mr. Smith confirms this conclusion.—Zeitschrift für Ægypt. Spr., January 1869, p. 12.

[2] Appendix to Smith's Assurbanipal, p. 374.

annals as having been done by Hezekiah at Jerusalem in the year B.C. 701, that is to say, of his having "shut himself up in his royal city, Jerusalem, like a bird in a cage—he built towers of defence over it, and strengthened and rebuilt the bulwarks of his great gate."[1] This is unquestionably the time when "he rebelled against the king of Assyria, *and served him not*": that is to say, some time *after* his first year (702), as collected from the Book of Chronicles, and some time *before* his fourth year (699), as described in the Second Book of Kings (xviii, 7, 9). So that as regards the interval of thirty-seven years between the 49th of Azariah and 2nd of Hezekiah, it appears that in the first year of that period (738), and in the last year (701), Assyrian and Hebrew records are agreed, according to the new reckoning. But if so, it would seem strange indeed that the same records should be found at variance to such an extent within the interval, that the whole reign of Jotham should have to be extinguished, and that the reigns of Ahaz, Pekah, and Hoshea should have to be so much raised, as to make the dislocated contents of the Books of Kings and Chronicles utterly worthless as history at this period.

Happily there is an unusual abundance of monumental and historical evidence still extant, of the highest character and authenticity, bearing upon this period, by which these questions may be set at rest, and by which to arrange the true chronology and sequence of events during these reigns. I will therefore first enumerate the several documents which I have consulted, and then proceed to analyse their contents.

I. There is Sir Henry Rawlinson's Assyrian Canon, containing the names of the eponymous archons of Assyria in unbroken series from the first year of Tiglath-Pileser (B.C. 745) to the year 688, or 17th of Sennacherib.

II. The well-known Babylonian Canon, based on astronomical data, beginning in the year B.C. 747, and recording the names and reigns of the kings of Babylon down to the same date.

III. The annals of the first seventeen years of the reign

[1] I follow Mr. Fox Talbot's early translation, which differs slightly from that given in "Records of the Past," p. 39. Both agree in representing that Hezekiah at this time closed his great gate, and bid defiance to Sennacherib's attack.

reign of Tiglath-Pileser, from tablets in the British Museum, beginning in the year 745, and containing two, if not three, successive lists of tributary kings of Syria and Palestine who owned the supremacy of the king of Assyria between the years B.C. 745 and 727.

IV. The annals of Sargon king of Assyria from B.C. 722 to 705, translated by MM. Oppert and Ménant from inscriptions at Khorsabad, entitled "Fastes de Sargon."

V. The well-preserved annals of the Books of Kings and Chronicles, in duplicate copies, Hebrew and Greek, containing histories of the kings of Judah and Israel in connexion with the neighbouring kingdoms of Egypt, Assyria, and Babylon: and the writings and prophecies of Amos, who wrote two years before the earthquake in the days of Uzziah; of Jonah, who wrote in the days of Uzziah; of Hosea, who wrote in the days of Uzziah, Jotham, Ahaz, and Hezekiah; of Micah, in the days of Jotham, Ahaz, and Hezekiah; and of the great prophet Isaiah, who lived and wrote in all these reigns.

VI. There is the history of Josephus, containing a valuable extract from Menander's translation of the Tyrian records, relative to a siege of Tyre which lasted five years in the reign of Shalmanezer, when Elulæus was king of Tyre; also a precious extract, from Clement of Alexandria, from the Jewish historian Demetrius, fixing with precision the time of the carrying away of the ten tribes from Samaria by Shalmanezer in February, B.C. 695; and the retreat of Sennacherib from Judea (the second time) in February B.C. 687; and Karaite records of the date of the captivity of the ten tribes, preserved in inscriptions on ancient tombstones in the Crimea and in ancient manuscripts, fixing the year of their captivity in B.C. 696.[1]

VII. Lastly, an extract from Herodotus, showing that when Sennacherib invaded Palestine, Sethos was still on

[1] Concerning these inscriptions and manuscripts, Ewald writes—"I may remark, that the attempts to reject these inscriptions as spurious, like that to cast suspicion on the Karaites and their ancient manuscripts of the Bible, seem to me entirely groundless."—Hist. of Israel, Appendix, p. 299. Facsimiles of the inscriptions by Neubauer will be found in vol. v, Melanges Asiatiques, St. Petersburgh, 1864; in Chwolson's paper, in "Memoirs of the Imperial Academy," St. Petersburgh, 1865; Adolph Neubauer's "Geschichte des Karaerthums," Leipsig, 1866; and Bosanquet's Preface to "Messiah the Prince," 2nd edit. 1869.

the throne of Egypt: a few extracts from Polyhistor and Abydenus, copied from Berosus, relative to this same period: and the legendary history of the Book of Tobit, who was of the tribe of Naphtali, and was carried away to Nineveh by Shalmanezer (called Enemessar), and made purveyor to that king: and who was actually living within the walls of Nineveh at the time when Shalmanezer died and Sennacherib took the throne.

Such a mass of evidence, chiefly contemporary, is scarcely to be met with in connexion with any period of ancient history: and there ought to be no difficulty in coming to very exact and definite conclusions in conformity with it, either for or against the common reckoning. And if we are content to accept the evidence of the documents as it is written, I venture to say that no difficulty will be found in rejecting the orthodox reckoning as impossible.

Let us first take the facts recorded in the Hebrew annals, and trace them down from the reign of Azariah to the reign of Hezekiah, following the dates of the new reckoning. We there read that "in the 52nd year of Azariah king of Judah Pekah the son of Remaliah began to reign over Israel in Samaria, for twenty years" (2 Kings xv, 27), that is to say, from the autumn of B.C. 735 to 716, when he was slain by Hoshea. About the same time Azariah appears to have been struck with leprosy, and being compelled to dwell in a house separately till the day of his death, Jotham his son took possession of his palace, and began to reign in association with his father, that is in B.C. 734 (2 Chron. xxvi, 21; 2 Kings xv, 27–32).

Now after the accession of Pekah (735), Tiglath-Pileser we are told "took Ijon, and Abel-beth-maachah, and Janoah, and Kedesh, and Hazor, and Gilead, and Galilee, all the land of Naphtali, and carried them captive to Assyria." And again "In those days (that is in the days of Jotham after 734) the Lord *began* to send against Judah Rezin the king of Syria and Pekah son of Remaliah," from which it appears that the king of Damascus, Rezin, still maintained his independence after that date, and was powerful enough to carry war into his neighbour's dominions, say about B.C. 730.

Such is the history contained in the royal records of the kings of Judah and Israel. What do the contemporary prophets, Amos, Micah, and Isaiah write concerning the conquest of Syria and Palestine, which the king of Assyria had now determined to carry into effect. Amos about the year B.C. 765 had named the cities of Damascus, Hamath, Calneh, Tyre, Samaria, Gaza, Ashdod, and Ascalon, as still flourishing and independent, though threatened with foreseen invasion and captivity; and Pul king of Assyria had levied tribute in Samaria in 746, from Menahem, nine years before Tiglath-Pileser received his homage in 738.

Micah, in the reign of Jotham, speaks of Samaria and Jerusalem as suffering from invasion, that is after B.C. 734; and with reference to Samaria says—"Her wound is incurable, for it is come even unto Judah. He (the king of Assyria) is come unto the gate of my people, even to Jerusalem" (chap. i, 9): while Isaiah, whose first vision is dated "in the year that king Uzziah died," that is to say in the reign of Jotham, some eight or ten years perhaps after 734, describes with much minuteness the distressed and miserable condition to which Judea had been reduced in the years preceding his death, thus—"your country is desolate, your cities are burned with fire, your land strangers devour it in your presence,"—"and the daughter of Zion is left as a cottage in a vineyard, as a lodge in a garden of cucumbers, as a besieged city" (chap. i, 7, 8). Such was the abject state of Palestine and Jerusalem about the year B.C. 732.[1] Tiglath-Pileser's army had at this time made its appearance before the gates of Jerusalem.

Let us now turn to the Assyrian monuments. We have already ascertained that the first year of Tiglath-Pileser was B.C. 745. Mr. George Smith has met with fragments of a Syrian tribute list in the British Museum, which he places in the 3rd year of Tiglath-Pileser's reign (743): from which we learn that the cities of Carchemish and Tyre, and the district

[1] Mr. Birks, who follows the common reckoning, does not scruple to transfer this description of the state of Judea from the time of Uzziah to the reign of Hezekiah, because he can find no other place for it. This is another instance of the sacrifice of evidence to theory. Birks' Isaiah, 1871.

of Hamath were yet governed by their own local kings, as tributary vassals to the king of Assyria.[1]

The next list of tributaries is that of the 8th year of Tiglath-Pileser (738), to which we have already frequently referred, when Rezin king of Syria, Menahem king of Samaria, Hiram king of Tyre, Pisiris king of Carchemish, Eniel king of Hamath, Zabibi queen of the Arabs, and twelve other kings acknowledged the supremacy of the Assyrian king: showing the progress of the extension of the empire towards the west. (Cuneif. Insc., vol. iii, p. 9.) Again, in the 13th and 14th years of Tiglath-Pileser, that is in B.C. 733, and 732, when Jotham was on the throne of Judea, and Uzziah leading the life of a leper, we learn from the Assyrian Canon that two expeditions were made towards Damascus, where we may assume that Rezin had thrown off his allegiance—his name not appearing amongst the tributaries—and on a tablet[2] in the Museum we find that twenty-five kings of Syria and Palestine are now registered as vassals of Assyria. Amongst the tributaries we still read the name of Pisiris king of Carchemish, and Metenna is now king of Tyre, Eniel is still reigning over Hamath, Pekah is on the throne of Samaria, *Yahu-Kazi* is king of Judah, Vassarmi king of Tabal, Metinti king of Ascalon, Hanun king of Gaza, and Samsi is now become queen of the Arabs. Thus Jerusalem for the first time appears to have come under the yoke of Assyria in B.C. 732, and the frontier of the empire had become still further extended towards the west, Damascus and Carchemish being yet ruled by their own local kings.

The date of this tablet is very accurately fixed by its contents. For in the 15th line there appears the name of the Chaldean king Nabu-u-sabsi,[3] probably the same as Nabius in the Canon of Ptolemy, who reigned two years, that is in 733, and 732, who was now put to death: in the 23rd line appears the name of Kinzirus,[4] the successor of Nabius at Babylon, in 731, though not yet styled king in the tablet; and in line 42 is the name of the Tartan, Assur-danin-ani, who was archon eponymous in B.C. 733. Nothing can be more

[1] Zeitschrift für Æg. Spr., July, 1869, p. 92.
[2] Cuneif. Insc., vol. ii, p. 67.
[3] G. Smith, Trans., vol. i, p. 84.
[4] Babylonian Canon.

precise. It may be observed also that in most of the conquests of Tiglath-Pileser mentioned in this tablet the same expression is used as in Isaiah, the cities "were burned with fire."

In the years B.C. 729 and 728, Tiglath-Pileser is described in the Assyrian Canon, as performing religious ceremonies in *honour of the god Bel*, the expression being translated "the king took the hands of Bel," evidently marking a known religious epoch.[1] And in the following year (727) we read—"Shalmanezer sat on the throne"—that is to say he was associated on the throne with his father, having been appointed, as usual in the East, his chosen successor before his father's death. Just sixty years, or one soss, after the year 727, that is in B.C. 667, the same process of selecting a successor was gone through by Esarhaddon—"on a fortunate day, the *festival of Bel*," when Assurbanipal was seated on the throne of Nineveh in association with his father,[2] before his father's death. Again, sixty years before the year 727, that is in the year B.C. 787, a new temple was erected to the god Nabo, and the year before that (B.C. 788) is marked in the Canon as the termination of a *kharru* or cycle. From all which it may be inferred that Shalmanezer, who we may assume was the legitimate or adopted son of the usurper Tiglath-Pileser, was merely associated with his father on the throne in the year of the periodical renewal of the great sixty-year Cycle of Bel or Belus, in B.C. 727. There is no evidence whatever to show that Tiglath-Pileser ceased to reign in that year. On the contrary, the evidence is that Ahaz, who did not begin to reign till B.C. 718, visited him at Damascus after that date. Moreover, the usual appointments of Tartan and Prefects, which accompanied the accession of a new king of Assyria, did not take place when Shalmanezer was thus seated on the throne.

[1] Mr. Smith (vol. ii, p. 330) reads—"sa-nat Kir-ruri, governor of Kirruri." I suggest as possible, sa-nat שָׁנָה Khar-ru-ri, *year of Cycle?* Sargon tells us that in the year B.C. 709 he entered the sanctuary of Bel at Babylon, "and took the hands of the great god Merodac." B.C. 709 was probably the end of the second cycle of 19 years counted from B.C. 747. See also Mr. Sayce, p. 15: "Yu-mu mit-Kharru," day of Cycle, or 30th day of the month. From the verb כָּרַר, to move in a circle.—Gesenius: as first pointed out by Rawlinson. Kara, in Arabic, in gyrum ambivit.—Norris.

[2] Smith's Assurbanipal, p. 4

Let me now offer a few words in digression concerning the great chronological epoch of the building of the tower of Belus, with the view of showing that the year B.C. 727 was truly a year of cycle in Assyria. The era of Belus we know commenced not long after the period of the flood, that is to say, some few years before the invasion of Babylonia by Kudurnan-hundi or Kudurnan the Hindoo,[1] and the establishment of the dynasty of the Medes or Elamites in Mesopotamia in B.C. 2286 (vol. ii, p. 173). The earliest and most simple account of the building of Babylon and the Tower of Babel is found in the 11th chapter of Genesis, immediately after the history of the flood, having been written nearly fifteen hundred years before the birth of Christ. We are there told that one named Arphaxad was born two years after the flood, and that in the time of his great grandson Peleg, "the earth was divided," and the people being scattered, "left off to build the city": and that the name of that city was called Babel. The writer then goes on to say, "these are the generations of Shem"; "Shem begat[2] Arphaxad two years after the flood":—

Birth of Arphaxad	2	years
Birth of Salah	35	„
Birth of Eber	34	„
Birth of Peleg	30	„
	101	„

So that Peleg, in whose lifetime the dispersion of languages took place, was born 101 after the flood, and before the time of the dispersion the city and tower had of course been many years in building.

Again, these are the sons of Ham:—

Cush ... ...
Nimrod ... ...

"In the beginning of his [Nimrod's] kingdom was Babel, and Erech, and Accad, and Calneh."

[1] "*De Astronomia.* Illis temporibus quibus turris condebatur quidam *Indus* extitit, ex stirpe Arphaxad, sapientiæ laude, et astronomiæ cognitione clarus, nomine Andubarius." (Eber?) Chronicon Paschale, vol. i, p. 64.—Qu. tempore Andubarii.

[2] With regard to the use of this Biblical term "begat," as lineal descendant or successor, see Lord Arthur Hervey's "Genealogies of our Lord," p. 49.

Now it is no unimportant fact that the text of this early sacred record was revised and re-established about 500 years before Christ, one thousand years after it had been written, on the settlement of the Hebrew Canon by "Ezra the priest, the scribe," and the men of "the great synagogue":[1] men not brought up in any secluded spot such as Jerusalem, but all recently returned from a long sojourn at Babylon, the seat of learning in the East, where they had become acquainted with the wisdom of the wise men of Babylon, as Moses had become learned in the wisdom of the Egyptians, and where the records of the creation and the flood we are told were preserved on tablets with the greatest care and reverence. Haggai, Zechariah, Malachi, Zerubbabel, Mordecai, Ezra, Jeshua, and Nehemiah, were not obscure persons. Some of them had moved in the courts of Babylon and Shushan, and must have been well versed in the literature of Assyria and Babylon such as it was in those days, and had seen no doubt the sacred tablets: while the tablet writers clearly had become acquainted with the record of Moses. Two hundred years later than Ezra, Berosus copied these Babylonian tablets for the information of the Greeks: and according to the evidence of Polyhistor, confirmed by the contents of one of the tablets (vol. ii, p. 213) lately discovered and translated by Mr. Smith, there is much similarity between the sacred record and that of the Babylonians as regards the flood. Mr. Smith is of opinion that the original of these tablets may be traced as high as the 17th century B.C., that is before the time of Moses. Nevertheless, the accounts are perfectly distinct and independent. The one comes down through the degraded race of Ham, the other through the race of Shem, through whom the world was to be blessed. There is hardly a trace of similarity between the mythical and revolting records of creation in the Hammite story, and the grandeur and simplicity of the narrative of Moses. It would be in vain also to attempt to reconcile the fragmentary notices of the reckoning of the interval of years between man's creation and the flood, as given in the one account, with the distinct reckoning of

[1] Chronologia Sacra-Profana, David Ganz, p. 56.

Moses of 1656 years from Adam to the flood. The primæval mode of counting years for days, and days for years, throughout the period, however, is sufficiently apparent.[1]

But I wish particularly to draw attention to the fact, that after the flood the reckoning of Berosus and the sacred reckoning are exactly one and the same: still however coming down through two different families of the sons of Noah. We learn through Moses that after this earth had existed for many ages "without form and void," Jehovah in human form descended on the earth, created man in his own image, and made him, as Talmudic Paul asserts, a little lower only than the angels. Again, that when this full grown, childlike, godlike being was formed, seven lofty lessons concerning his creator's works were at once impressed upon his pliant mind, in metaphoric form, in words for ever after to be retained, to lift his thoughts towards God, and lead the mind of man to worship the creator of all things around him:—

1st. Of light and darkness, night and day.
2nd. Of air and sky.
3rd. Of dry land and sea.
4th. Of time to be computed by suns and moons.
5th. Of living creatures in the sea.
6th. Of living creatures, male and female, on dry land.
7th. Of rest from labour on the seventh day.

"And God blessed *the seventh day*, and sanctified it, because that in it he had rested from all his work which God had made."

Now the subject of our treatise is the fourth and seventh of these lessons given to man. God did not, could not, rest for weariness from labour. But in these emphatic, allegoric words he taught, and in after ages so was it fully understood, that all time on earth should be evolved in periods of seven. A seventh day, a seventh year, a seventh period of 1,000

[1] 120 saroi, of 3,600 each, are said to represent 432,000 years, instead of so many days, = 1,200 years, which latter is no doubt the true interpretation. Syncellus writes—*ὁ γοῦν παρ᾽ἀυτοὶς σάρος λεγόμενος ἡμέραι εἰσὶ τρισχίλιαι καὶ ἑξακόσιαι, κ.τ.λ.* The same word saros was applied to 3,600 days, and 3,600 years. The tablets of Berosus lately discovered may perhaps set this question at rest.

years of rest.[1] Neither did God create the sun and moon and starry sky within one single day: but graciously revealed to new-born man that thenceforth "seasons, days, and years" should follow in succession the revolutions of those heavenly bodies, and that the perpetual calendar of time should be marked and measured by the "signs" of visible conjunction of sun and moon in the heavens, as long as time endured. And thus we learn that the first year of man on earth was reckoned as a sabbath by divine decree: and thus again we learn that 6,000 years when counted from creation should end in a period of sabbath of 1,000 years by the same decree.

Now the actual series of sabbatical years observed by "the holy people" in accordance with this command is already sufficiently well known: and if we thence could fix with certainty the date of the last sabbath of the 6,000 years, we should know of course the date of the creation. Or if we knew the date of the creation, or of the flood, we should also know the date of the last sabbatical year, and period of final rest. I propose therefore to state briefly how we may obtain the actual date of the sabbath of creation through Berosus; and how the date of the final sabbath is already distinctly and emphatically fixed in Sacred Scripture.

To Moses was revealed the history of things "*in the beginning.*" To Daniel, not less favoured, was revealed the history of things pertaining to "*the time of the end.*"

"O my lord," he exclaimed, "what shall be the end of these things? And he said, go thy way Daniel: for the words are closed up and sealed, *till the time of the end.*" "And from the time that the daily —— shall be taken away, and the abomination that maketh desolate set up, there shall be a thousand two hundred and ninety days. Blessed is he that waiteth and cometh to the thousand three hundred and five and thirty days" (xii, 8, 9, 11, 12). And again, "when he shall have accomplished to scatter the power of the holy people, all these things shall be finished" (*v.* 7).

[1] See Elliott's Horæ Apocalypticæ, vol. iv, pp. 252, 253, treating fully on this subject, with quotations from Rabbi Eliezer, Barnabas, Irenæus, Cyprian, Lactantius, and Ambrose, showing the universal expectation of a millennial sabbath following 6,000 years from the creation. Plato quotes Orpheus—
Ἕκτῃ ἐν γενεῇ κατακαύσει κόσμος ἀειδής.

Now I will not stay to prove, as I have done elsewhere,[1] that the *desolating* power here described by Daniel which should rise out of one of the four divisions of Alexander's kingdom; the "king of fierce countenance, and understanding dark sentences," who should "destroy wonderfully," and "destroy the mighty and the holy people," who should cast down the truth to the ground, and by whom the daily —— should be taken away, and the place of his sanctuary cast down, was Mahomet and Mahometanism; and that this profanation of the holy land must therefore be dated either from the year of the Hejira, A.D. 622, when the false prophet fled for refuge to Medina from Mecca: or from the sabbatical year A.D. 629, immediately after which he conquered Mecca, and established his power, after having scattered and destroyed with much cruelty the Jewish people, driving them from their refuge in Arabia, and casting down the *place* of the sanctuary, the holy land even to this day. The last of these years, the date of the triumph of Mahometanism, is of course the date to be preferred; and 1,335 full years counted from the end of A.D. 629 lead to the final sabbath in A.D. 1965, and therefore by counting backwards 6,000 years lead also to the year B.C. 4035 as the first sabbath of creation.

Let us now refer to the passage from Polyhistor already quoted from Eusebius (vol. ii, p. 171). Berosus, from whom Polyhistor copies, writes—"After the flood Evexius held the territory of the Chaldeans for a period of four ners." Evexius we take for granted was Arphaxad, and he having held the territory for four ners of days, that is 2,400 days, or nearly seven years, "after him his son (Noah's son?) Comos-Belus held the empire for a period of four ners and five sosses," that is till after seven years counted from the flood.[2] Comos-Belus, or Khemosh-Belus, Kham, or Ham the lord, that is Baal, may therefore have begun the foundations of the tower and city. "But from Xisuthrus, and from the time of the flood, to the time when the Medes took Babylon, Polyhistor reckons altogether 86 kings," or "33,091 years." Now

[1] See "Messiah the Prince."

[2] Polyhistor here makes Khemos-Belus a descendant of Shem, instead of Khem or Ham his brother, which must be an error. It matters not, however, as the whole period is afterwards bridged in 93 years.

86 kings, or *sarri*, should I think be read 86 saroi of 360 days,[1] or 30,960 days, which added to the four ners and five sosses of Kham, or Comos-Belus = 2,700 days, counted from the flood, make together the great period of 33,660 days in round numbers. This is a period of rather more than 93 years of 360 days. The figures of Polyhistor, of which however there are higher readings, thus altered make rather more than 92 years of 365 days from the flood to the Medes. Whether however we add 93 years to B.C. 2286, or 92 years to B.C. 2287, the beginning of the Cycle of Belus, we arrive at the year B.C. 2379 for the date of the flood: and adding the 1,656 years of Moses between the flood and the creation, with which probably the reckoning of Berosus coincided, we come again to the same figure B.C. 4035, as the great sabbatic year in which God pronounced His gracious ordinance of weekly rest.

When Epigenes recorded that astronomical observations had been carried on at Babylon for 720,000 years, which figure represents the exact number of days equivalent to 2,000 cycles of 360 days each, he was undoubtedly recording the fact that Berosus, the priest of Belus in the days of Philadelphus, in his treatise on Chaldean astronomy, written say about the year B.C. 287, had spoken accurately of 2,000 Chaldean years of observations counted from the Cycle of Belus, B.C. 2287, when astronomy commenced with the Babylonians.

CYCLE OF BELUS.[2]

B.C.		B.C.		B.C.	
2287	... 1st Soss.	1687	... 1st Soss.	1087	... 1st Soss.
2227	... 2nd Soss.	1627	... 2nd Soss.	1027	... 2nd Soss.
2167	... 3rd Soss.	1567	... 3rd Soss.	967	... 3rd Soss.
2100	... 4th Soss.	1507	... 4th Soss.	907	... 4th Soss.
2047	... 5th Soss.	1447	... 5th Soss.	847	... 5th Soss.
1987	... 6th Soss.	1387	... 6th Soss.	787	... 6th Soss.
1927	... 7th Soss.	1327	... 7th Soss.	727	... 7th Soss.
1867	... 8th Soss.	1267	... 8th Soss.	667	... 8th Soss.
1807	... 9th Soss.	1207	... 9th Soss.	607	... 9th Soss.
1747	... 10th Soss.	1147	... 10th Soss.	547	... 10th Soss.
1688	= 1 Ner.	1088	= 2 Ners.	488	= 3 Ners.

[1] See Mr. Sayce's Astronomy and Astrology of the Babylonians, p. 11.

[2] Durat adhuc ibi (Babylone) Jovis Beli templum. Inventor hic fuit sideralis scientiæ.—Plin. Nat. Hist. vi, 26.

This far-reaching Hammite Cycle, which we infer from the tablets was accompanied by a daily record of the position of the heavenly bodies throughout the period, throws into shade the minor cycles of the Olympiads, the era of Nabonassar, and era of Rome: and is exceeded only by the sixty-year cycle of Chinese astronomy, reaching to the year B.C. 2637, or 258 years before the flood of Noah.[1] But in addition to this Hammite Cycle, there is also to be taken into consideration a nearly concurrent Semitic Cycle of far greater interest and importance in framing the outline of the history of the world. As the two heathen races counted in periods of sixty years, so God's holy people were distinguished from all other races on the earth by counting as they were commanded in periods of forty-nine years, or seven weeks of years: and as the Babylonians used the multiple of 10, producing thus the Neros of 600 years, so the times of the holy people were laid out in cycles of ten times 49, or 490 years, or "seventy weeks" of years. This latter cycle, running throughout the history of the Israelites, is coeval with the promise made to Abraham and Isaac, and must be carefully attended to in laying down the outlines of Biblical chronology. "Lift up now thine eyes, and look from the place where thou art, northward, and southward, and eastward, and westward: for all the land which thou seest, to thee will I give it, *and to thy seed for ever*" (Gen. xiii, 14, 15). "Unto thy seed have I given this land, from the river of Egypt unto the great river, the river Euphrates" (xv, 18). This temporal promise of possession of the land of Canaan, which cannot be broken or forgotten, was confined exclusively to the literal seed of Abraham. The spiritual blessings we know were to be extended to all the nations of the earth.

Now the Cycle of the Jubilee had reference solely to the occupation of the land; they bought and sold their land in this cycle, according to the remaining number of the years of the Jubilee. Those who had alienated their land came into repossession in the year of Jubilee, and by those alone were the first fruits of repossession devoted to God, as in the

[1] See Mr. John Williams' Treatise on Chinese Chronology and Astronomy, 1871. Introductory Remarks, p. viii.

sabbatic year. The Cycle of the Jubilee of 49 years, and of ten periods of Jubilee, or 490 years, could not, of course, commence before the donation of the land. But they did commence precisely with the perpetual grant, made in Ur of the Chaldees, before Abraham dwelt in Haran, when about sixty-five years of age:[1] four hundred and seventeen years after the flood, of B.C. 2379.

Cycle of the Jubilee
of 49 years;
and of Ten Jubilees, or Seventy Weeks,
or 490 years.

	B.C.
The Call of Abraham, when dwelling in Ur of the Chaldees, before he dwelt in Charran, at about the age of 65	1962
490 years from thence to the appearance of Jehovah to Moses on Mount Horeb	1472
490 years from thence to the dedication of the temple of Solomon	982
490 years from thence to the first year of Darius son of Hystaspes, at Babylon, at the age of about 62	492
490 years from thence to the birth of Christ	3-2

Jubilees.

B.C.		B.C.		B.C.	
Oct. 1962....	1st Jubilee	Oct. 1472....	1st Jubilee	Oct. 982....	1st Jubilee
„ 1913....	2nd Jubilee	„ 1423....	2nd Jubilee	„ 933....	2nd Jubilee
„ 1864....	3rd Jubilee	„ 1374 ...	3rd Jubilee	„ 884....	3rd Jubilee
„ 1815....	4th Jubilee	„ 1325....	4th Jubilee	„ 835....	4th Jubilee
„ 1766....	5th Jubilee	„ 1276....	5th Jubilee	„ 786....	5th Jubilee
„ 1717 ...	6th Jubilee	„ 1227....	6th Jubilee	„ 737....	6th Jubilee
„ 1668....	7th Jubilee	„ 1178....	7th Jubilee	„ 688....	7th Jubilee
„ 1619....	8th Jubilee	„ 1129....	8th Jubilee	„ 639....	8th Jubilee
„ 1570....	9th Jubilee	„ 1080....	9th Jubilee	„ 590....	9th Jubilee
„ 1521....	10th Jubilee	„ 1031....	10th Jubilee	„ 541....	10th Jubilee
Oct. 1472....	1st Cycle	Oct. 982....	2nd Cycle	Oct. 492....	3rd Cycle.

490 years to the Birth of Christ, Oct. 2–1, 4th Cycle.

Now it will be observed that the Cycle of Belus commencing in the spring of the year, and counted down from the

[1] "The God of glory appeared unto our father Abraham when he was in Mesopotamia, before he dwelt in Charran, and he said"—"come unto the land I will show thee"—and "he promised that he would give it to him for a possession, and to his seed after him."—Acts vii, 2, 3, 5.

year B.C. 2287, and the Cycle of the Jubilee commencing in the autumn, and counted upwards from the birth of Christ 3–2, cross each other once, and only once, within six months in the cyclical year B.C. 787–6: that is to say, just sixty years before the accession in Assyria of Shalmanezer IV in B.C. 727, and in the year preceding the accession in Judea of Azariah, or Uzziah. And thus it should be.

For as the year B.C. 787 of the Cycle of Belus, which is concurrent with the sabbatical year 787–6, is exactly 49 years, or one Jubilee, before the years B.C. 738, which we have already ascertained was the 8th year of Tiglath-Pileser and concurrent with the 48th year of Azariah (vol. ii, p. 153), it appears that the 47th year before that date, or B.C. 785, the second half of the cyclical year of Jubilee, must have been concurrent with the first year of the reign of Azariah. And so it is set down in the new reckoning.

Again, if Oct. B.C. 786–5 was the cyclical year of Jubilee concurrent with the first year of Azariah, then must the 49th year of Azariah have been concurrent with the cyclical year of Jubilee B.C. 737–6, and the next following year of Jubilee, B.C. 688–7, must have been concurrent with the 15th and 16th years of Hezekiah, as also appears in our reckoning.

To recapitulate—I have observed that, after the flood, the reckoning of Berosus and the sacred reckoning are exactly one and the same. I have said that when Polyhistor speaks of Evexius, or Ephexius, and Comos-Belus, he refers to the names Arphaxad, and Ham in the Book of Genesis: though the parallel goes no further than the names. In fact the confused account of Polyhistor is irreconcilable with Moses.

Nevertheless, Polyhistor, under various readings, has preserved the reckoning of Berosus between the flood and the invasion of the Medes, as between 33,000 and 34,000 days, or 93 years. And thus Berosus and Moses are agreed in their reckoning.

BEROSUS.

Era of Belus B.C. 2287 + 92 = Flood B.C. 2379.

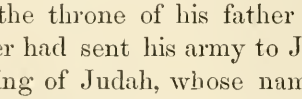
MOSES.

Cycle of the Jubilee B.C. 1962 + 417 = Flood B.C. 2379.

But it may be asked, how is this period of four hundred and seventeen years collected from the Book of Genesis? Archbishop Ussher and Mr. Fynes Clinton, two high and independent authorities, have laid down the reckoning, and the principal feature of agreement between them is, that the "Birth of Abraham was in the 130th year of Terah."

After the Flood.			
Shem	....	....	2
Arphaxad	....	....	35
Salah	....	....	30
Heber	....	....	34
Peleg	....	....	30
Reu	....	....	32
Serug	....	....	30
Nahor	....	....	29
Terah....	....	....	130
Birth of Abraham	....	....	352 + 65 = 417 years.

We must now bring this digression to a close, without pursuing further the interesting subject of the cycles. It is clear however from what has been observed that the year of the accession of Shalmanezer IV, which is fixed by the Assyrian Canon to the year B.C. 727, was truly a year of cycle in the era of Belus, as has been said.

Before we proceed further it is necessary to remove a considerable difficulty which is supposed to stand in the way of this arrangement: a difficulty indeed which is looked upon by many as sufficient to set aside all the foregoing reasoning. For we have seen that in the year B.C. 732, when Jotham had held the throne of his father Uzziah three years, Tiglath-Pileser had sent his army to Jerusalem and taken tribute of the king of Judah, whose name in the list of tributaries is set down as Yahu-kazi. There is no question that the name  , according to the ordinary rendering of each cuneiform sign, is correctly deciphered. It should therefore represent according to the date, either Jotham, or Uzziah the still living leprous king. Sir Henry Rawlinson,[1] however, Dr. Oppert,[2] and Mr. Smith, all interpret the name

[1] Athenæum, May, 1867.

[2] Revue Archéologique, December, 1868, p. 384.

as representing Ahaz, son of Jotham: and accordingly in vol. ii. p. 328, we read—"B.C. 734-732. Expedition of Tiglath-Pileser against Damascus, Israel, and Philistia, tribute of Yahuhazi (Ahaz) king of Judah." But if Ahaz were on the throne of Judah as early as B.C. 732, his reign of sixteen years would take the place of the sixteen years of Jotham: and as the reign of Uzziah cannot be raised, the history of these reigns would thus become contracted and thrown into a state of absolute confusion. We may, however, safely and decidedly reject the historical arrangement of these eminent philologists in this instance as untenable. The chief element in this name as written in the cuneiform inscription is Yahu, or Jehovah: but there is no such element in the name of Ahaz. On the other hand, Yahu is contained both in Jotham יוֹתָם, and Uzziah עֻזִּיָּהוּ. Jotham is written in the Septuagint *Ιοαθαμ*, and the cuneiform character 𒀀, which forms the last syllable of Pekah, and the first syllable of Hamata, may possibly have had the softened value, *Ath*, while 𒀀𒀀 was sometimes sounded, *Im*. So that the Assyrian scribe may possibly have intended to represent Jotham by Yahu-ath-im. Such an interpretation would be consistent with and corroborative of the new reckoning. Nevertheless, I do not think that it is the true solution of the difficulty. Yahukazi was, I think, the same name as Khuzzi-yahu, or Uzziah, reversing the syllables. The leprous father of Jotham was called to the throne at the age of sixteen as Azariah (strengthened by Jehovah), and he was generally known to the Assyrians in his contests with Tiglath-Pileser by this name, as pointed out by Mr. Smith.[1] But he was called Uzziah only throughout the priestly history of the Book of Chronicles. It is highly improbable that he should have borne both these names at the same time: and if we will follow his history as written in the Book of Kings, we find that the name is there written throughout his reign of fifty-two years Azariah, with one singular exception in his 39th year, the year when Pul king of Assyria was in the land, "but stayed not there." In

[1] W. A. Ins. 9, 3, 4, 23.

that particular year only the name is written *both* ways, "Uzziah," and "Azariah" (2 Kings xiv, 13 and 17). In his 50th and 52nd years, when Pul was dead, he is again called Azariah. But Jotham his son is invariably called son of Uzziah. There is no one instance, either in the Book of Kings or Chronicles, of his being styled son of Azariah.

From all which I should infer that Azariah was not permanently called Uzziah (power of God) till the end of his reign, and that his name was changed from time to time, according to the vicissitudes of his fortunes. First, in his 39th year, B.C. 748, when it is not improbable that he became tributary to Pul, that is to say, in the same year that Menahem paid tribute, though there is no record of the fact, and that Kazar-yahu was then changed to Khuzzi-yahu. A second time the degraded name was forced upon him by the priests, when "Jehovah had smitten him," and he became a leper, "and they thrust him out," in B.C. 734, and "Jotham son of Uzziah ruled his kingdom." Still living on, and nominally king, he reached the year B.C. 732, when Jerusalem having become as a "besieged city," and tribute having been exacted by Tiglath-Pileser from Judah, his name was finally changed in the Assyrian tribute-roll from Kuzzi-yahu to Yahu-kuzzi. Two instances of this custom of changing the name in token of subjection are met with in after days,—when Pharaoh Necho having "put the land to a tribute," Eliakim's name was changed to Jehoiakim,[1] and when Nebuchadnezzar, having made Mattaniah king, changed his name to Zedekiah.[2] Yahu-kazi, therefore, is not Ahaz, but probably Kuzzi-yahu, and Hebrew and Assyrian records at this point do not contradict but rather confirm each other. In fact, the attempt to tack on Yahu to Ahaz, is another instance of tampering with the text to support an untenable theory. One thing is certain, Ahaz had not yet come to the throne in B.C. 732, according to the Assyrian records, that is to say, ten years after his accession according to the common reckoning.

Having thus disposed of this difficulty, let us proceed with the history, as written in the Hebrew annals. Uzziah was sixty-eight years old when he became a leper, and pro-

[1] 2 Kings xxiii, 33, 34. [2] Ibid. xxiv, 17.

bably lived many years after B.C. 734. "The *rest of the* acts of Uzziah first and last," that is from 734, when he became a leper, to "the year that king Uzziah died," were written by Isaiah,[1] and this year of his death, which is the date of the sixth chapter of Isaiah, did not probably precede by many years the date of his next chapter, seven, which was in the reign of Ahaz, B.C. 718. Uzziah may have lingered out his leprous life even till the year B.C. 724, at which time Isaiah may have foretold that the cities of Judah should "be wasted without inhabitant, and the houses without man, and the land be utterly desolate." All which literally came to pass about the year 718, when Pekah king of Samaria "carried away captive (from Judah) of their brethren 200,000, women, sons, and daughters—and brought the spoil to Samaria" (2 Chron. xxviii, 8): and when Rezin placed the Syrians in Elath, and together with Pekah endeavoured to take Jerusalem.

Up to the year B.C. 718, Samaria and Damascus in both records remained powerful kingdoms. But in the year 717, Isaiah marks the date of their downfall with much precision. A child is born to the prophet about the 2nd year of Ahaz, and he is told that "before that child shall have knowledge to cry my father, and my mother, the riches of Damascus and the spoil of Samaria shall be taken away before the king of Assyria." The king spoken of we know was Tiglath-Pileser, who came to the assistance of Ahaz, took Damascus, and slew Rezin (2 Kings xvi, 9): and Pekah his associate was slain about the same time by Hoshea, in what is called the 20th year of Jotham, B.C. 715. The date of the fall of the two kings is thus precisely marked as somewhere between 717 and 715.

After this, say in B.C. 714, "Ahaz went to Damascus to meet Tiglath-Pileser" (2 Kings xvi, 10), and this is the last time that Tiglath-Pileser is named in the history. He had been on the throne some thirty-two years, and was probably old and infirm; he may possibly have passed his latter days in Damascus. Meanwhile Shalmanezer his son, as far

[1] 2 Chron. xxvi, 22.

as we can judge in the absence of his annals, had not proved himself equal to the great exigencies of the empire, and accordingly a vigorous warrior. Sargon, who fixed his palace at Khorsabad, at the north of Nineveh, had come upon the scene with a certain portion of kingly power, ranging over Nineveh, and commissioned probably to hold good the northern frontier, as early as B.C. 722. In 712 he appears to have been raised to the throne of the empire in association with Shalmanezer, Tiglath-Pileser having died in B.C. 713; and this latter date is fixed by a passage in the Fastes de Sargon, where, after taking possession of Babylon in B.C. 709, Sargon speaks of that year as the *third year of his reign*, as distinguished from the years of his campaigns. Many military exploits had been performed by Sargon before he usurped the imperial throne. In B.C. 721 he made a raid upon Samaria, took the city, and carried off "27,290 captives, men, women, and children": a somewhat small affair, but one in which he proved himself more than a match for Pekah. This victory, however, by no means broke the power of Samaria. For in B.C. 720 we find that a confederacy was formed, consisting of the people of Hamath, Arpad, Samaria, and Damascus, to throw off the yoke of Assyria, and the Egyptians and Ethiopians at the same time showed their hostility. Sargon in that year captured Yahubi'di, or Ilubi'di, king of Hamath, and flayed him alive; he then went down towards Egypt, and fought the battle of Raphia, conquered the Egyptians with Sebec, or more probably Sethos priest and king of Egypt, as their leader, and placed an Assyrian governor in Hamath. Carchemish, however, did not fall to the Assyrians till the year 717, in which year also an Assyrian colony was first placed in Damascus.[1]

It will be remarked that Sargon gives no account of this overthrow of Rezin at Damascus, because, as the Book of Kings informs us, it was under the leadership of Tiglath-Pileser himself that Rezin was slain, and the people of Damascus carried to Kir (2 Kings xvi, 9). But in the year B.C. 715, Sargon having taken twenty-two cities of Armenia,

[1] See Fastes de Sargon, and Zeitschrift, July, 1869, p. 98.

and having also conquered the Arabians, transported his captives and placed them in Hamath and Samaria, where Pekah had been overthrown the year before. And thus the words of Isaiah were literally accomplished, that before the child which was born to Isaiah in 717 should know to cry my father, my mother, the spoils of Damascus and Samaria should be carried away.

It is quite clear from the evidence of these different contemporary witnesses that Tiglath-Pileser, Shalmanezer, and Sargon must all three have been associated together on the throne of Assyria in the year B.C. 717 by some state arrangement which has not yet been explained, for want of the annals of the reign of Shalmanezer. And the expression of the writer of the Second Book of Kings (xxviii, 16) is indeed most accurate, when he says—"At that time did king Ahaz send unto the *kings* of Assyria to help him." Again, it must have been within the few last years of Tiglath-Pileser's reign that Isaiah writes concerning the king of Assyria—"He saith, are not *my princes altogether kings?* Is not Calno as *Carchemish?* Is not Hamath as Arpad? Is not Samaria as Damascus?" (Isaiah ix, 10; x, 8, 9). For this passage, in which kings of Assyria are spoken of in the plural, could not have been written before the fall of Carchemish in B.C. 717. From chap. xi to chap. xxiii a series of miscellaneous pieces of Isaiah are put together apparently without chronological arrangement, containing "the burden of Babylon"—"the burden of Moab"—"the burden of Damascus"—"the burden of Egypt"—"the burden of Tyre," &c., in the course of which two illustrative passages occur—First, "In the year that king Ahaz died," that is in B.C. 703, "was this burden"—"Rejoice not thou, whole Palestina, because the rod of him that smote thee is broken: for out of the serpent's root shall come forth a cockatrice, and his fruit shall be a fiery flying serpent." Now Sargon, the rod which smote Palestine, died in 705: and his fruit was Sennacherib who invaded Palestine in 702, as we have seen, like a flying serpent. The Hebrew and Assyrian annals here are well agreed. Again, "In the year that (the) Tartan came against Ashdod" (xx, 1), that is to say in B.C. 711 accord-

ing to Sargon's annals. The words in the original of this passage, which are not quite literally translated in the authorised version, are very illustrative of the regal state of Assyria in B.C. 711. Tiglath-Pileser was no longer living. Shalmanezer was legitimate king. Sargon was reigning at Khorsabad. The passage runs thus :—

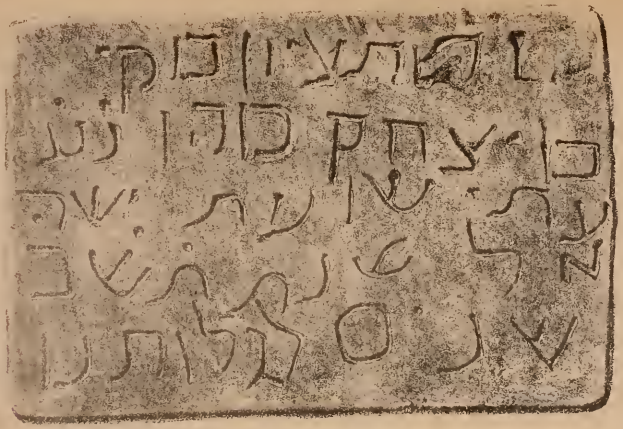
בִּשְׁנַת בֹּא תַרְתָּן אַשְׁדּוֹדָה בִּשְׁלֹחַ [1] אֹתוֹ סַרְגּוֹן מֶלֶךְ אַשּׁוּר
וַיִּלָּחֶם בְּאַשְׁדּוֹד וַיִּלְכְּדָהּ :

"In the year (the) Tartan came unto Ashdod, on the sending of Sargon king of Assyria *with him*, and he fought against Ashdod and took it." Sargon in his annals claims to have taken Ashdod with his own hands, and the Hebrew annals here declare that it fell before the Tartan. They add however that Sargon was *sent* with the Tartan, and if sent, there must then have been a king supreme who sent him. Again the Hebrew and Assyrian records are agreed.

That Sargon was king of Assyria in B.C. 711 rests on the authority of his own inscriptions. That Shalmaneser must also have been still with him on the throne is attested by the contemporary prophet Hosea, who mentions Shalman as associated with Sennacherib even fifteen years later. For on the final destruction of the kingdom of Samaria, after Hoshea had reigned nine years, in B.C. 696, the prophet writes—"As Shalman spoiled Beth-arbel in the day of battle" —so "in a morning shall the king of Israel be cut off." The calf of Beth-aven "shall also be carried unto Assyria for a present to king Jareb" (x, 5, 6, 14, 15). Now Shalman unquestionably represents Shalmaneser, and Jareb "king of Assyria" is without doubt Sennac-jareb, who was reigning in the sixth year of Hezekiah when Samaria fell in 696. And thus it is quite certain that Sargon's raid on Samaria in B.C. 721 could not have taken place so late as the reign of Hoshea, and that Samaria was not finally destroyed till just 25 years later than that date. Shalmaneser (Enemessar)

[1] אֵת with suff. "in company with," B. Davidson's Analytical Lexicon. אֹתוֹ "with him," Gen. xxxiv, 6.

N° I.



Jewish Gravestone in the Crimea

according to the evidence of Tobit, reigned at Nineveh, or Nebbi-yunas, and when he died "Sennacherib *his son* reigned in his stead" (Tobit i, 15). Now Sennacherib we know was son of Sargon, who had died in B.C. 705. The fact of his thus calling himself son of Shalmanezer, as also that in his annals he suppresses the name of his father Sargon, tends to show that he was more proud of his connexion with the legitimate line of kings than of his descent from one who apparently was merely an accessary to the throne: and it is not unreasonable to assume that he may have actually become son of Shalmanezer, by marriage with the daughter of that king, and succeeded to the throne as sole sovereign of the empire in B.C. 688, when he took the title Assur-acherib, and then first appointed the Tartan and other prefects of his court. We have thus disposed of the two kings Tiglath-Pileser and Sargon, the first having probably died in B.C. 713, the latter certainly in B.C. 705. Throughout this period Assyrian and Hebrew records are accurately agreed, when the reigns of the kings of Judah and Israel are lowered to the extent of twenty-five years: while on the other hand they are at variance at every step with the common reckoning. Though not yet in possession of the annals of Shalmanezer, there seems to be sufficient evidence to show that he reigned from B.C. 727 to 689, that is to say for thirty-eight years: and I will close this part of the subject by referring to the direct testimony to the fact, that Samaria was indeed taken by Shalmanezer in the sixth or seventh year of Hezekiah, B.C. 697–6. The Hebrew text says the sixth year, Josephus says the seventh. I have already referred to the Jewish historian Demetrius, who states that the ten tribes were carried away in February, B.C. 695, from which we infer that the capture of the city was in the preceding year 696; and I will now add a few words with regard to the Karaite manuscripts and sepulchral monuments which bear testimony to the same effect.

"The old gravestones in the Crimea," writes Neubauer,[1] "which are now recognised as genuine by all men of learning,

[1] Geschichte des Karaerthums, p. 29.

attest that there were Jewish communities in the Crimea as early as the year A.D. 6"—"and that the Jews there held themselves to be descended from the ten tribes." Three different eras are recorded on these monuments, as well as in many ancient manuscripts of the Karaites. First, the era of the captivity of the ten tribes, B.C. 696, לגלותנו. Second, the Karaite era of the creation, ליצירה, B.C. 3911. Third, the era according to the reckoning of the inhabitants of Metarcha, that is the common Rabbinical era of creation, B.C. 3760. Facsimiles of three of the gravestones, out of several which have been carried up to St. Petersburgh, will be sufficient to certify the date of Shalmanezer's capture of Samaria,[1] or the commencement of the era Ligaluthenu.

No. 1.

זאת ציון בוקי
בן יצחק כוהן נע
עת ישועת ישר
אל שנת תשב
שנים לגלותנו

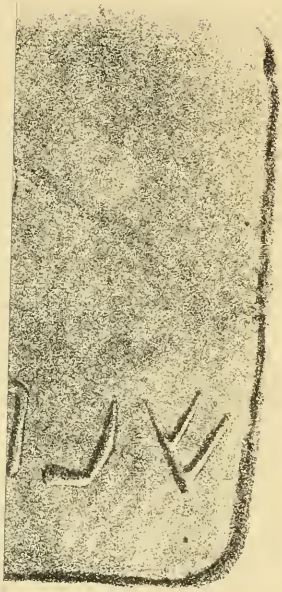
This is the tombstone of Buki, the son of Izchak, the priest: may his rest be in Eden, at the time of the salvation of Israel. In the year 702 of the years of our Exile (= A.D. 6).

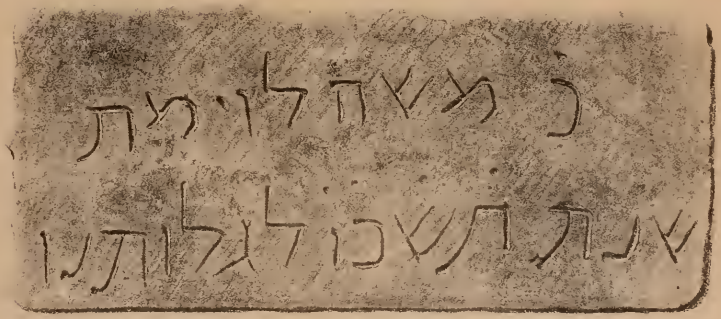
No. 2.

ר משה לוי מת
שנת תשכו לגלותנו

Rabbi Moses Levi died in the year 726 of our Exile (= A.D. 30).

[1] A full account of the discovery of these interesting monuments, taken from Chwolson's work, will be found in the Preface to "Messiah the Prince." The mode in which the year B.C. 696 is deduced I have also there explained. Dr. Geiger of Frankfort writes in support of their genuineness. Tischendorf and Olshausen are also in favour of their antiquity. See also references, p. 6, and Addenda to Ewald's "History of Israel," English translation.





JEWISH GRAVESTONE IN THE CRIMEA

No. 3.

צדוק הלוי בן משה
מת דא לצוה
תשפה לגלותנו

Zadok the Levite, son of Moses, died 4000 after the creation, 785 of our Exile (= A.D. 89).

I have thought it expedient to dwell thus briefly on the recovery of this obsolete era of the captivity of the Ten Tribes, or

SHANIM LIGALUTHENU
Years of our Exile from B.C. 696,

as in itself an interesting fact in Biblical Archæology, and as confirmatory of the new reckoning at several later dates, in addition to its special bearing on the matter in hand, the date of the fall of Samaria. For it appears to me sufficiently clear that this era must have been made use of by the writers of two books appertaining to the ten tribes of Israel, viz., the Book of Tobit and the Book of Judith. When the writer of the first of these books relates, according to the Greek translator, that Tobias died at Ecbatana at the age of 127 (which is absurd), "and before he died heard of the destruction of Nineveh which was taken by Nabuchodonosor and Assuerus," that is by Nebuchadnezzar and Cyaxares, in B.C. 583 new reckoning, we can hardly doubt that the words in the original, derived either from his tombstone or from some family document, were written "shanath 127, shanim Ligaluthenu" (= B.C. 569), as on the tomb of Buki son of Izchak.[1] And again, that when Judith is said to

[1] As a matter of Biblical archæology it may be observed that the Book of Tobit has preserved an interesting reference to a passage in the prophet Jonah, not now found in our copies. "Go into Media, my son, for I surely believe those things which Jonas the prophet spake of Nineveh, that it shall be overthrown: and that for a time peace shall rather be in Media: and that our brethren shall be scattered in the earth from that good land: and Jerusalem shall be desolate, and the house of God in it shall be burned, and shall be desolate for a time: And that again God will have mercy on them, and bring them again into the land, where they shall build a temple, but not like to the first, until the time of

have lived to the age of 105, the words on her monument originally ran "mōth 105, shanim Ligaluthenu" (= B.C. 591), that is twelve years before Jehoiakim first became subject to Nebuchadnezzar.

Thus the date of the Fall of Samaria by the hand of Shalmanezer, the particulars of the history of which as related in the Assyrian records still lie buried with the annals of Shalmanezer, is securely fixed—

1st.	By the prophet Hosea. as occurring within the reign of Sennacherib, and after the year	B.C. 705
2nd.	By the Books of Kings and Chronicles, new reckoning, as in	696
3rd.	By Demetrius as occurring in the year ..	696
4th.	By the most ancient Jewish gravestones in the Crimea, as occurring in	696

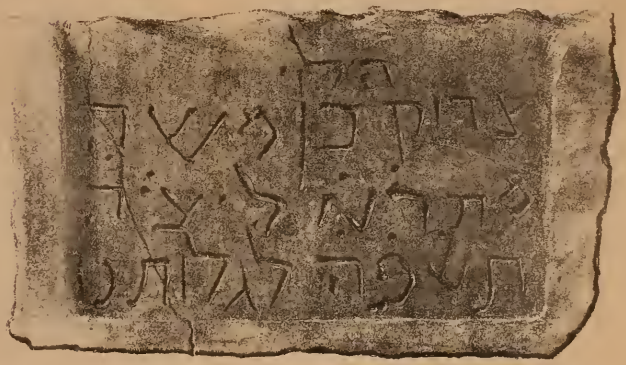
On the other hand, Mr. Smith, taking up what he conceives to be an impregnable position (vol. ii, p. 323), in his assumed identification of Ahaz and Yahukazi, looks with much satisfaction upon what he calls "the close agreement between contemporary Assyrian records and *the* Bible chronology," and deduces from thence

The Fall of Samaria in B.C. 720
The Illness of Hezekiah in 712

Both events being thus assumed to have taken place before Sennacherib had come to the throne. Nevertheless he has with perfect fairness called attention to two points which may throw doubt, in his opinion, on his own deductions: for he writes (vol. ii, p. 327), "It is doubtful whether Tirhakah king of Ethiopia, who came to assist Hezekiah, commenced his reign so early as B.C. 701: and, second, in the palace buried under the mound of Nebbi-Yunas *there are records of a later campaign of Sennacherib in Palestine about*

that age be fulfilled: and afterward they shall return from all places of their captivity, and build up Jerusalem gloriously, and the house of God shall be built in it for ever, with a glorious building, as the prophets have spoken thereof. And all nations shall turn and fear the Lord God truly, and shall bury their idols."—Tobit xiv, 4, 5.

Nº 3.



JEWISH GRAVESTONE IN THE CRIMEA

the year B.C. 690,"—and again elsewhere he writes—"It is evident that this second campaign to Palestine could not take place before B.C. 690, while it might be a few years later."

Now this is the discovery for which I have been looking forward for the last twenty years, as may be seen by reference to an article in the Journal of the Royal Asiatic Society, 1854, p. 277. I have never swerved from the conviction then expressed, that it was on the 11th January, B.C. 689, that Hezekiah began to recover from his sickness, and that one of those celestial "signs" promised to man, which dot the Sacred Calendar of time, was then exhibited to the king while stretched on his dying couch, towards the end of his 13th year, to strengthen his faith, on the approaching flood of invasion which threatened the entire extinction of the kingdom of David. On the actual arrival of the army of Sennacherib before the walls of Jerusalem, in the autumn of B.C 689, another "*sign*" of much chronological significance was also brought to notice, the bearing of which we will first consider before we enter on the subject of the remarkable "sign" exhibited on the steps of Ahaz. The sabbaths we know were a perpetual and peculiar "sign" between Jehovah and the seed of Abraham of favour and protection promised to them as the selected people of God. When threatened therefore with destruction by the Tartan, the Rabsaris, and the Rabshakeh, at the head of the army of Assyria, Isaiah is sent to declare that the army of Sennacherib shall be turned back. "And this shall be a *sign* unto thee, ye shall eat this year (689) such things as grow of themselves, and the second year (688) that which springeth of the same, and the third year (687) sow ye and reap" (2 Kings xix, 29). These are the very words used in Leviticus (xxv, 5, 11, 12) with reference to the celebration of the sabbatical year and also of the year of Jubilee, and the use of them here implies that two successive years of fallow should then be kept by the people of Judah, whether by constraint or otherwise, as a sign that Jerusalem should yet be saved, for the honour of Jehovah himself, and also for the sake of his servant David (2 Kings xix, 34).

Now the year B.C. 689–688 was sabbatical according to the regular septennial series: and 688 was a cyclical year of

Jubilee, as we have just ascertained, according to the Cycle of the Jubilee. Two years of fallow in succession could only thus come together once in fifty years, and Hezekiah could not possibly have been living either fifty years before or after this date. If, therefore, the words have reference, as we have every reason to assume, to the appointed calendar of sacred years of sabbath and Jubilee, B.C. 689–8 ought to be the year determined by the sign.

We now come to the consideration of the remarkable solar phenomenon exhibited to Hezekiah during his illness on the steps of Ahaz, in assurance to him of his recovery from his sickness and of the prolongation of his life for a further period of fifteen years.

It may perhaps be remembered that, in vol. i, p. 252, I have laid much stress upon the fact, that the new reckoning of the reigns of the kings of Judah is established by reference to three successive solar eclipses, each of which has the same effect of lowering the reigns to the exact extent of twenty-five years: and have argued that the inference from thence is irresistible, that the date of Hezekiah's illness, about the fourteenth year of his reign, must have coincided with the year of the eclipse in B.C. 689. I find, however, that certain observations of the Astronomer Royal, recently communicated to the Astronomical Society, with reference to the lunar theory as bearing on the subject of ancient eclipses in connection with history, have had the effect of shaking the faith of many in the truth of the historical inference thus arrived at, though otherwise inclined to be convinced. I propose, therefore, now to show as briefly as possible, that nothing which has hitherto been announced by astronomers, has in any way tended to disturb the accuracy of the historical conclusions which have been advanced. While, on the other hand, I venture to maintain firmly, and I trust not presumptuously, that the uncertainty into which astronomers confessedly have fallen with regard to the correctness of their theories, owing to the yet imperfect data upon which they have to base their calculations, will be in great measure removed by attention to this most accurate of all accurate astronomical observations, taken and recorded from the sick-room of Hezekiah in the year B.C. 689.

The original story, as told by Isaiah, is very shortly but precisely given. Hezekiah was sick unto death, and Isaiah came to him with the fatal message, "set thine house in order for thou shalt die and not live." Hezekiah then turning his *face to the wall*, for he was confined to his chamber and to his couch, prayed earnestly that he might recover from his sickness; and before Isaiah was gone out *into the middle court*, that is, the middle court of the palace, he was commanded to return and say to Hezekiah, "Thus saith the Lord,"—"I will add unto thy days fifteen years: and I will deliver thee and this city out of the hand of the king of Assyria,"—"and this shall be a *sign* unto thee,"—"Behold I will bring again the *shadow of the steps which has gone down* on the steps of Ahaz, ten steps backward. So the sun returned ten steps, by which steps *it was gone down*"[1] (Isaiah xxxviii, 1–8). The two expressions, "shadow of the steps," and "going down the steps," are sufficient to show that the degrees or steps here spoken of were literal steps of an ascent to some upper part of the palace, and not divisions of some graduated scale; and in fact this "*upper chamber of Ahaz*," עֲלִיַּת אָחָז was a well-known place in the palace (2 Kings xxiii, 11, 12), on the top of which were altars to the sun, approached, no doubt, by "the steps, or staircase, of Ahaz," rising from north to south, and turned away from the meridian or southern sun, to mark the length of shadow at noon-day. This "upper chamber" probably was a gallery running at right angles to the staircase towards the east, and led to "the entering in of the house of the Lord by the chamber of Nathan-melech the chamberlain," where we read in the same passage that the "horses" and "chariots of the sun" were

[1] I have lately heard a reverend gentleman, a Fellow of Trinity College, in my neighbourhood enforcing on his congregation, that the effect on the Dial of Ahaz could not possibly be the result of any natural phenomenon, because according to the authorised translation the choice was left to Hezekiah whether the shadow should go forward or backward. But it will be observed that Isaiah was not commissioned to make any such offer. The shadow had already "gone down." And if the reverend gentleman had consulted the Hebrew, he would have found that the translation of the passage in Kings, where the supposed choice is given, is not justified by the original.

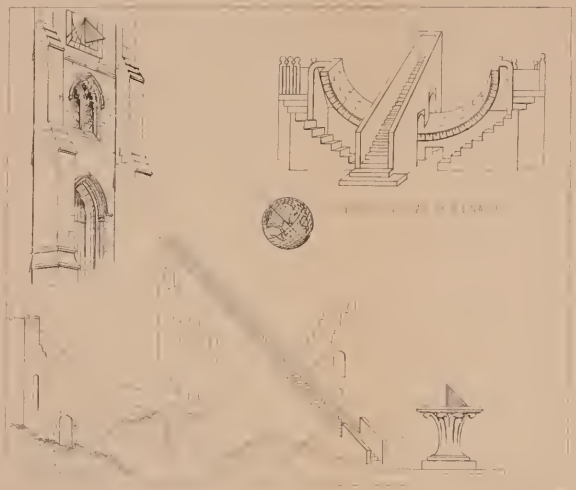
placed, driving as it were from east to west.[1] Hezekiah himself, we may assume, was lying in a lower chamber, shaded from the sun, either looking on to the staircase court, where he viewed the motion of the meridian shadow on the steps in open air, or more probably within a closed chamber into which a ray of light was admitted from above, which passed from winter to summer up and down an apparatus in the form of steps: for I have elsewhere shown that such enclosed chambers were in use in Eastern observatories for the purpose of taking meridian shadows even as late as the middle of the last century.[2] The Dial of Ahaz was no doubt a scientific instrument: and, if so, the gnomon was so placed as to cast its shadow on the shortest day in the year (28th December) at the foot of the lowest step, that is to say, at an angle of somewhat less than 34° 41′, which was the extreme altitude of the upper rim of the sun's disc at noon on the day of the winter solstice.

It would of course be impossible here to enter fully into the subject of dials, as used amongst the Babylonians. Herodotus, however, seems to have summed up, in the two words "pole" and "gnomon," the chief principles of dialling as known to the Babylonians, and thence transmitted to the Greeks.[3] These two principles were applied to instruments of many different forms and shapes, either fixed or portable: the pole being placed parallel with the axis of the earth towards the sun to the south, and marking the hours of the day, the gnomon upright marking the length of shadow from day to day, to the north from the summer to the winter solstice. The gnomon had been used from the very earliest days for the purpose of fixing the time of the solstice, by means of meridian shadows. Laplace has published, in the Connaissance des Tems, of 1809, p. 303, a most interesting article on gnomons from a manuscript of Père Gaubil, showing that the Chinese had in the city

[1] As in the Place St. Mark at Venice, where the Horses of the Sun have their faces towards the west.

[2] See "Messiah the Prince," p. 180; also Note B, in Appendix, p. 48.

[3] Herodotus ii, 109. *Πόλον μὲν γὰρ, καὶ γνώμονα, καὶ τα δυώδεκα μέρεα τῆς ἡμέρης, παρὰ Βαβυλωνίων ἔμαθον οἱ Ἕλληνες.*



of Loyang, in Honan, as early as the year B.C. 1100, determined roughly by means of a gnomon eight feet high the obliquity of the ecliptic.[1] The pole was a discovery of a more exact and scientific character. The invention of the pole and gnomon combined, producing an instrument perfect in itself for all observations connected with the sun's shadow, was probably associated with the rectification of the Babylonian Calendar in B.C. 747, nineteen years before the accession of Ahaz. Numa Pompilius also, who came to the throne at the same time as Ahaz (B.C. 718), in the beginning of his reign corrected the Roman Calendar, adding two months to the year, having been instructed by some barbarian philosopher.[2] The nature of the astronomical term "pole" may be gathered from the sarcastic description of the word given by Pisthetærus, in the play of the Birds by Aristophanes,[3] in whose days Athenian philosophers were wild upon astronomy. And from this description it appears to have been neither more nor less than the pole or axis of the earth, parallel with which, and fixed on the meridian, the styles or gnomons of all dials must necessarily be placed, as instanced in the great equatorial and equinoctial dials of Delhi and Benares, in the common garden dial, and the old church dial, all which are placed parallel with the axis of the earth.

Again, the testimony of Herodotus (ii, 141) is most valuable as to the time of Sennacherib's invasion of Egypt, and of the retreat of his vast army from Pelusium in the year of this phenomenon exhibited on the steps of Ahaz, as

[1] Mr. Drach has drawn my attention to four valuable notes of Laplace in his "Systeme du Monde," bearing on the same subject, p. 455.

[2] Plutarch's Life of Numa.

[3] PISTHETÆRUS. "Come, what d'ye see?
HOOPOO. The clouds and sky: that's all.
PISTH. Well, that we call the pole and atmosphere:
And would it not serve you birds for a metropole?
HOOP. Pole? is it called a pole?
PISTH. Yes! that's the name.
Philosophers *of late* call it the pole:
Because it wheels and rolls itself about,
As it were in a sort of roly-poly way,"
—*Translation of John Hookham Frere.*

being in the reign of Sethos king of Egypt, the last of the priests of Vulcan. And Lepsius, who has identified Sethos with Zeet, has I think correctly fixed the last year of Zeet's reign in B.C. 686. The remark of Herodotus is most accurate, that Sennacherib was at this time king of the *Arabians* as well as of the Assyrians: yet this valuable observation has not hitherto been understood. When Mr. G. Smith, however, shall have made good the proofs of his great discovery from Assyrian inscriptions, that Sennacherib made a second expedition into Palestine about the year B.C. 689–8, just twenty-five years below the common reckoning, and that at that time he conquered Hazail the king of the Arabians: the queen (?) of the Arabians declaring that "her seat was not with the people of Arabia,"—"to Assyria she took the road," —the accuracy and importance of Herodotus' remark will appear. Assuming then, I say, that Mr. Smith will establish the fact of this second expedition into Palestine about B.C. 689, I take it for granted that the "sign" which is said to have proceeded from the sun, and which was witnessed by Hezekiah on the Dial of Ahaz, was no other than the movement of the shadow during the solar eclipse of the 11th January, B.C. 689, which was visible at Jerusalem: and which being only fourteen days after the winter solstice (28th December), would have had the effect of causing a shadow from the south, cast on a staircase, sloping downwards towards the north, and lying nearly parallel with the steps of the staircase, to recede to the extent described in the history, even "ten steps," and that with a deliberate motion not to be mistaken, extending over twenty minutes. So great an effect could not have been produced on the steps at any other period of the year: nor could the alteration of the shadow exhibited either east or west by means of the "pole," or southern ascent of the gnomon, have produced any more than a trifling motion of inches, such as could hardly have been looked upon either as "a sign," or as "a wonder done in the land." The shadow, therefore, did not proceed from the pole of the dial.

The extreme altitude of the sun's disc on the 11th January, B.C. 689, was 35° 27′ at noon: while the altitude

Vincent Brooks, Day & Son, Lith.

GNOMON OF THE [illegible] AHAZ [illegible] THE [illegible]

Noun[illegible] Shadow 11[illegible] [illegible]

of the gnomon over which the ray of light would have descended, whether the gnomon was an erection in the inner court of the palace, or formed by an opening in the wall of the chamber of the king, would have stood at an angle of 34° 41′.

Now what I have to observe, and what with all due deference to astronomers I wish to maintain, is, that the astronomical *observation* here recorded by Isaiah fixes the place of central conjunction of sun and moon on that day, within the narrow limits of sun's declination N. 35° 27′ and 34° 41′, as viewed from Jerusalem: and also fixes the time of central conjunction as somewhere about twenty minutes before noon. For the phenomenon could not have been exhibited before the sun had risen above the gnomon at about half-past eleven o'clock. Time must be allowed for the exhibition of the rise and turn of the shadow downwards on the steps, and then again for the passing away of the phenomenon before the sun had reached its extreme altitude at noon.

"The shortest day in B.C. 690 was Dec. 28 (Julian). The meridian altitude of the sun at Jerusalem on that day was .... 34° 25′

Ten days later (or earlier)	34	47
Twenty days later (ditto)	35	53
Thirty days later (ditto)	37	45

"The altitude of the Sun on the 11th January, at each ten minutes before and after 12 o'clock :—

H.	M.	°	′	H.	M.
11	0	33	20	1	0
11	10	33	54	12	50
11	20	34	22	12	40
11	30	34	43	12	30
11	40	34	59	12	20
11	50	35	8	12	10
Noon.		35	11	Noon."	

To which figures I have added the semi-diameter of the sun for the outside of the disc, 16′ 13″.

When I first put forward this explanation of the shadow on the Dial of Ahaz in the year 1854, in the Journal of the Royal Asiatic Society, the Astronomer Royal, to whom, with Mr. Hind, I take this opportunity of expressing my deep

obligations for many astronomical calculations and observations far beyond my own reach, wrote thus in reply to my inquiries—"The eclipse of B.C. 689, January 11, was annular, and the annulus was rather broad. The sun's apparent semi-diameter was 16′ 13″, and the moon's (in the neighbourhood of Jerusalem) was 15′ 3″.

"The course of the central line of shadow, with Greenwich Elements, is defined by the following points:—

Longitude E.		Latitude N.		Apparent Time at the place.	
°	′	°	′	H.	M.
21	43	35	3	21	36
30	12	34	52	22	30
37	8	36	37	23	18
44	10	40	11	0	5
53	26	46	37	1	3

It passes nearly through Issus.

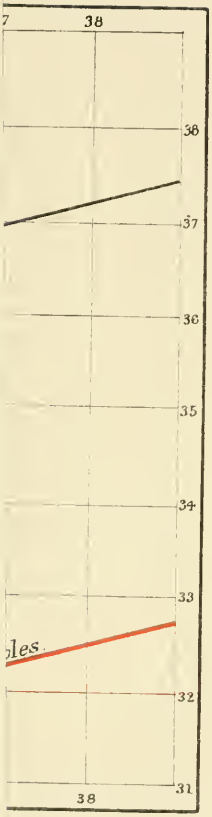
"I have not computed the breadth of the annular zone upon the earth; but I can see that the eclipse would be as nearly as possible just annular at Jerusalem; perhaps sensibly annular, perhaps not quite annular.

"With "variation" of Elements (using the word in the technical sense of my paper), the course is:—

Longitude E.		Latitude N.		Apparent time at the place.	
°	′	°	′	H.	M.
20	18	37	14	21	30
29	23	36	51	22	27
36	40	38	37	23	16
44	1	42	24	0	5
54	12	49	38	1	6

"In this, which is a more probable course, the eclipse would not be annular at Jerusalem, but it would be a very large eclipse. It seems to me that a large eclipse, in which the 'shadow' or darkness appears to advance on the sun to a very great degree and then to recede, is better adapted to the words of the Hebrew history than a total eclipse would be."

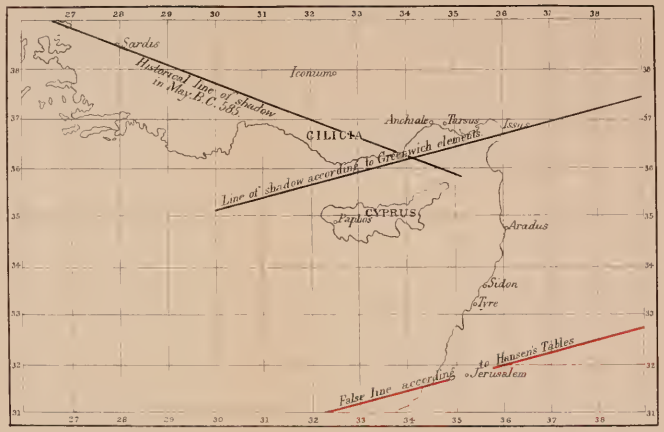
To face page 38.



teps or dial of Ahaz.

1850 6/74 237

Eclipse of Thales, 28th May B.C. 585.



Eclipse of Hezekiah, 11th Jan. B.C. 689, when the shadow went down ten steps on the steps or dial of Ahaz

Now this computation of the Astronomer Royal, made in the year 1854, before the introduction of Hansen' Tables, appears to me to be invaluable: first, because it entirely accords with the facts deduced from Isaiah's history; and, second, because it is based upon Greenwich Elements, that is to say, upon Elements deduced from *observations* made at Greenwich, and ranging over a period of one hundred years. From the same Elements, Sir George Airy had, in a paper read before the Royal Society in 1853, laid down the paths of two other solar eclipses, that is to say, of the eclipse of Agathocles in B.C. 310, and of the eclipse of Thales B.C. 585, and both the lines of shadow so laid down appear to me to be also strictly in accordance with history: the fundamental argument then being, that Agathocles on his passage from Syracuse to Africa, sailed north, not south, of Sicily. This fundamental fact I take to be indisputable: as also the definite conclusions as to *time* and *place*, or longitude and latitude of central conjunction of sun and moon during the eclipse observed by Hezekiah in B.C. 689, which are in agreement with this fundamental fact.

Nevertheless, in 1854 the idea of coupling the year B.C. 689 with the 14th year of Hezekiah was then pure matter of speculation, apparently opposed to all authority, and not therefore to be taken seriously into account in scientific discussion of the lunar theory. Unfortunately, also, about the same time Hansen's Lunar and Solar Tables were completed, and adopted in this country, and printed at the expense of our Government. By these supposed improved tables, frequently trimmed to suit exigencies, the course of Agathocles was driven by computation to the south of Sicily, and the eclipse of Hezekiah entirely put out of the question.

In 1866 Hansen's final corrections placed the central path of the eclipse of Agathocles (August, B.C. 310) one degree and a half below Cape Passaro, the south-east point of Sicily, that is to say, some three degrees below the probable position of the fleet of Agathocles which beheld it.[1] And in 1871, Mr. Hind, reviving the almost discarded eclipse of Hezekiah, computed, in accordance with Hansen's "last value of the

[1] Monthly Notices of R. A. S., Feb. 1866, p. 186.

moon's secular equation," that the eclipse of B.C. 689 was central and annular at Jerusalem in lat. 31° 47′: thus placing the shadow between 3° and $3\frac{1}{2}$° below the recorded position according to observation. No one of course can find fault with Mr. Hind for not travelling beyond the most approved tables of the day. I thought it, however, necessary at the time to protest against the deviation from actual observation resulting from his computation, feeling confident that sooner or later it would be set aside.[1] And such indeed appears now to be the result.

Monsieur Delaunay, who died in 1873, had come to the conclusion that, as regarded the theory of the moon's secular acceleration, astronomers for a time would have to be dependent entirely on the records of ancient eclipses, and Sir George Airy has very recently expressed his conviction "that there is still some serious defect in the lunar theory."[2] With regard to "Professor Hansen's Theory and Tables," he also gives his "reasons for almost omitting them from a view of the progress of the science," and for considering the introduction of his theory "as in fact a retrograde step."[3]

Now this in fact is merely repeating the conviction of historians and chronologists already expressed. It must be obvious to every reasonable inquirer, and I have no hesitation in pronouncing it to be a truth, that no lunar theory of acceleration can be correct which necessarily implies that Agathocles took his course to Africa by a southern route from Syracuse: and, with submission to so great an authority as a Mathematician and Astronomer as Sir George Airy, I argue that the same certainty of error may be deduced from the recorded phenomena connected with the eclipse of January, B.C. 689.

I will now close these observations with a few remarks on the voyage of Agathocles to Africa, with the view of showing that his fleet must have taken a route north of Sicily: and that the total eclipse of the sun which took place on the second day of his voyage must have been seen 3° north of where Hansen puts it.

[1] Appendix to Smith's Assurbanipal, p. 346.

[2] Monthly Notices of R. A. S., Nov. 1873.

[3] Ibid. Jan. 1874.

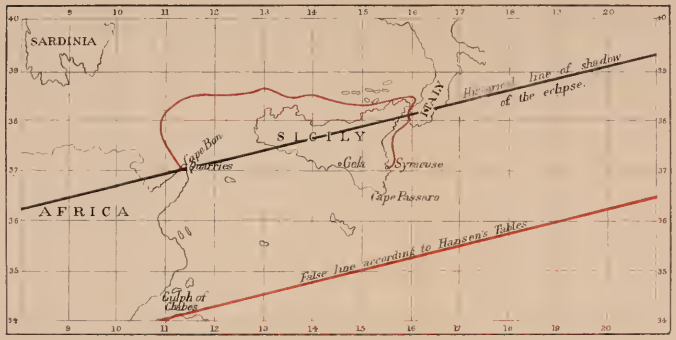
The history of Agathocles, prince of Syracuse, is that of a great military genius. It is generally considered that the bold idea, afterwards put in execution by Hannibal, of invading Italy with the view of diverting the Roman armies from the overthrow of Carthage, was derived from this original conception of Agathocles of delivering Sicily from subjugation by the Carthaginians by carrying the war into Africa, in the year B.C. 310. In that year Agathocles was shut up in Syracuse, the Carthaginians having obtained possession of almost the whole of Sicily with the exception of that city, and Gela to the south, which Agathocles had taken from them by stratagem. The Carthaginian fleet, which far outnumbered any ships which Agathocles could bring against them, closely blockaded the port of Syracuse and the city was becoming short of provisions. In this extremity Agathocles announced to his army that he had discovered a way to victory, but communicated his plan to no one, excepting possibly to his two sons. Justin observes that his silence concerning his scheme was as admirable as the conception. Having built sixty vessels in the port, he kept them constantly manned, and assuming that each vessel on the average contained from 100 to 150 men, his army may be computed at from 6,000 to 9,000 men. His idea was to convey this small army from Syracuse, in safety and without diminution, to the shores of Africa, notwithstanding the presence of the superior fleet outside the port, which was capable of destroying his whole force in detail before reaching its distant destination. We do not read that he lost a single man while carrying his scheme into execution. He calculated his chances so nicely, that according to Diodorus he delayed his expedition till the most favourable time for navigation—the month of August: and from the reading of the story of his voyage, it may almost be inferred that he had taken into calculation the darkness of the nights, his time of sailing being on the day of the new moon.

On that day, being the 14th August, a fleet of provision ships is seen to appear in the offing, coming to the relief of the city: and these ships, we may assume, had come from the friendly port of Gela, from the south, from whence alone

Agathocles could command supplies. The Carthaginian fleet immediately quitted the port of Syracuse, and with its whole force went out in pursuit of the provision ships, which, if informed of the Prince's wishes, would of course have retreated towards the south. Meanwhile Agathocles, being fully prepared for the event, finding the entrance of the port free, issued forth with his fleet and army all provisioned for a voyage, with great speed. The Carthaginians, who by this time, it is said, had reached the relieving ships, seeing the exit of the Sicilian fleet from the harbour, hesitated and drew themselves up for battle. But when they perceived that the fleet of Agathocles took a direct and steady course away, no doubt along the eastern shore of Sicily towards the north, they turned in pursuit. The convoy of provisions then entered safely into the port of Syracuse, and before the Carthaginians could come up with the Sicilian fleet, darkness came on, suddenly—for there was no twilight—and saved them from pursuit. We may reasonably assume that the darkness did not prevent Agathocles from pursuing his bold and pre-determined course. Guided by the stars he struck off from Sicily out into open sea in the direction towards Italy. The course which he was taking is not indeed mentioned by Diodorus. But the words of the concise and accurate Justin bring the whole scene before our eyes. For Justin writes that Agathocles, "accompanied by his two adult sons, Archagathos and Heraclidas, directed his course towards Africa, no one in the army being acquainted with the point of destination. When (cùm), that is, while proceeding on their course, they all thought that they were either on a marauding expedition to Italy, or that they were bound for Sardinia," that is to say, they first thought that their destination was Italy, because they rowed towards Italy, they then rowed towards Sardinia, which description can only imply a northern course. "Having landed, however, safely in Africa, Agathocles then for the first time explained to his army his design of attacking Carthage."[1] This bold

[1] Justin. xxii., vi. 5. "Septimo igitur imperii anno, comitibus duobus adultis filiis, Archagatho, et Heraclidâ, nullo militum sciente quo veheretur, cursum in Africam dirigit. Cùm, omnes aut in Italiam prædatum se aut in Sardinam ituros

Eclipse of Agathocles. Aug.t B C 310.



Voyage of Agathocles from Syracuse to Africa with an army of 9000 men.

and ingenious scheme for carrying the war into the enemies' territory is strikingly similar to the deep-laid scheme of Napoleon I. for the invasion of England with 40,000, in boats prepared in the port of Boulogne in the face of a superior force. The one, however, was entirely successful, the other failed by the breaking of a single link. The English fleet had been inveigled to the West Indies, according to scheme, but the French fleet failed to take the opportunity of occupying the Channel.

Diodorus now takes up the history and says, that "on the following day, August 15th, there was an eclipse of the sun, the stars appeared in every direction, *and everything had the appearance of night*" (lib. xx, p. 735). The word "night" is the indubitable sign of a *total* eclipse. The fleet must have been in the centre of the shadow, at between eight and nine o'clock in the morning: and considering the exertions which had no doubt been made on the first setting off of the expedition, the fleet could hardly have proceeded less than seventy miles, or one degree north. They then continued their journey unpursued for "six days and as many nights," when at the dawn of the seventh day they came suddenly in sight of a Carthaginian fleet, as they were approaching the place on the coast called "the stone quarries," λατομίας, a well-known spot, as pointed out by Sir G. Airy, on the west of Cape Bon.[1] The fleet of the Carthaginians being inferior to that of Agathocles, the army was safely landed, and the ships destroyed. And here again it may be observed how Agathocles had so planned his voyage that his approach towards the African coast should be during the darkness of night.

Now the distance from Syracuse to the quarries, by the southern route, is 200 nautical miles: and by the northern route about 330 miles, so that the rate in one case would have been about thirty-three miles per twenty-four hours: by the other fifty-five miles. The northern course on this ground therefore also is to be preferred. But the absence

crederent, tum primùm, exposito in Africæ littore exercitu, consilium suum omnibus aperit."

[1] Philosophical Transactions, 1853, p. 188.

of any hostile fleet in pursuit during five days of the journey seems to me quite decisive on the point. The central path, therefore, of the shadow of the eclipse, August, B.C. 310, must have crossed the Straits of Messina in lat. about 38° N., not in lat. 35° N., where Hansen's Tables put it. And as the eclipse of B.C. 310, and that of 689, in the days of Hezekiah, were both at the ascending node, the shadow of the latter would have been affected in the same direction, and to rather a greater extent northward of the position computed by Mr. Hind from Hansen's Tables, owing to the greater obliquity of the winter ray. The exact position of the shadow on the earth during the eclipse of the 11th January, B.C. 689, cannot be laid down except by the finished calculations of such astronomers as Sir G. Airy and Mr. Hind. Of this, however, we may be certain, that the motion of the sun in declination was nearly stationary on that day, for forty minutes about noon at Jerusalem, about the altitude of 35° 27′, which agrees exactly with the recorded *observation* at Jerusalem on that day. And as regards the moon, the Lunar Theory being now disencumbered of Hansen's rejected term, would seem to fall back into the position deduced from Greenwich *observations* in 1854, which also was in agreement as far as I can judge with the Jerusalem observation.

Thus, then, I have endeavoured to show:—

1st. That there is no reason as yet to be derived from the words of the Astronomer Royal for doubting that the three solar eclipses of B.C. 763, 689, and 585, combine to prove, as I have said, that the common reckoning of the reigns of the kings of Judah should be lowered to the extent of twenty-five years: but rather the contrary.

2nd. That the supposed identification of Ahaz with Yahukazi is certainly incorrect, and does not therefore interfere with this new reckoning: and that it is certain also that Ahaz was not on the throne till after B.C. 732.

3rd. That from the thirty-eighth year of Azariah, B.C. 738, and from the eighth year of Tiglath-Pileser, B.C. 738,

to the second year of Hezekiah, B.C. 701, and to the third campaign of Sennacherib, B.C. 701, Assyrian and Hebrew records are agreed throughout.

4th. That the sixth or seventh year of the reign of Hezekiah, when Samaria was taken by Shalmanezer, thus reduced to the year B.C. 696, falls as it ought within the reign of Sennacherib, in agreement with the prophet Hosea, Demetrius, and the Era Ligaluthenu, or era of Samaritan exile.

5th. That the 14th year of the reign of Hezekiah, thus reduced to B.C. 689, coincides with the date of the second campaign of Sennacherib in Palestine, as announced by Mr. Smith in vol. ii, p. 327; and also with the sabbatical year B.C. 689, reckoned upwards from three recorded sabbatical years.

Lastly. That Biblical Chronology thus arranged leads with precision to the recovery of the Cycle of the Jubilee, which necessarily commenced with the donation of the Holy Land to the seed of Abraham, which thus appears to have begun in B.C. 1962, and from thence with the same precision leads up to the date of the Flood of Noah, showing agreement between the records of Moses and of Berosus as regards the Flood.

The true principles of the reckoning of time from the beginning will not be perfect till astronomers shall have settled the yet open question of the theory of the motions of the Moon, or exact Cycle of Conjunctions of Sun and Moon in the Ecliptic from the remotest times: which great desideratum it is hoped may be ere long accomplished by the hand of Sir George Airy. Nor yet again till this astronomical Cycle shall have been brought into unison with the astronomical Cycle of the Era of Belus, and also with the sacred Cycle of the Jubilees, and the Sothiac Cycle in Egypt. Meanwhile I trust that the foregoing observations, touching upon the whole period from Creation to the end, will at least have placed beyond dispute that the deplorable system of dogmatic chronology hitherto

taught throughout Europe in connection with the rise and fall of the dynasty of David, which indeed consists of little less than one series of contradictions between Sacred and Profane history, must be set aside, as I have long contended, as leading to untruthful and unsatisfying interpretations of Holy Scriptures.[1]

[1] See Ewald's distressing observations on Daniel and Esther,—History of Israel, Book V., 1874; and especially his observations concerning the duration of the Exile, which he could not have conceived had he been aware of the error of 25 years in the common reckoning. Pusey's unsatisfactory interpretations of Daniel and the Minor Prophets, 1866 and 1868. Birks' confused Exposition of the Chronology of Isaiah, 1871.

APPENDIX.

Additional Notes to page 34.—Note A.

In illustration of the early use of Gnomons for measuring Meridian Altitudes.

Connaissance des Tems, 1809, p. 393.

"*Des Ombres Méridiennes du Gnomon observées à la Chine.*

"De tout tems les Chinois ont observés les ombres du soleil à midi et à d'autres tems, mais la plus ancienne observation qui reste, est celle de Tcheou-koung, frère de Vou-vang, dans la ville de Loyang.

"Première observation.—Selon la tradition, un gnomon de 8 piés donnait a midi l'ombre d'un pié 5 pouces au solstice d'été. Cette ombre est dans l'ancien livre Tchiouli et ailleurs, et les auteurs des Hans supposent cette observation incontestable.

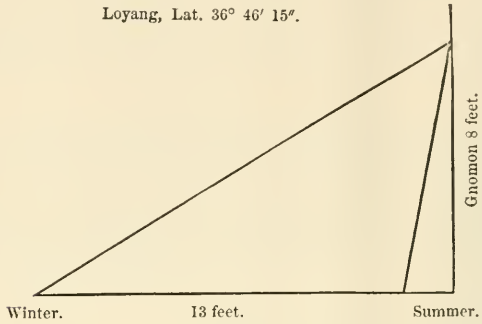
"Loyang est la ville de Honaufou dans la Honan: selon l'observation du P. Regis cette ville est à la hauteur de 34^{d} 46′ 15″.

"Un pié 5 pouces d'ombre pour un gnomon de 8 piés, donne un latitude de 34^{d} 22′, en supposant la déclinaison de l'ecliptique de 23^{d} 29′. Tcheou-koung gouvernait l'empire pour son neveu, l'an 1100 avant J.C., et c'est lui qui fit batir le palais impérial à Loyang; c'était une seconde cour de l'empire de Tcheou: si on admettait une déclinaison de 23^{d} 55′ au tems de l'observation, on aurait une latitude de 34^{d} 48′ 51″, ce qui est remarquable. C'est encore une tradition qu'au solstice d'hiver Tcheou-koung observa avec la même gnomon une ombre de 13 piés (cette tradition n'est pas si sûre que la première), cette ombre donnerait une vraie

Hauteur de centre	.. ..	31^{d} 18′ 42″
Contour d'été ..	.. ..	79 7 11
	Différence	47^{d} 45′ 29″

moitié 23^{d} 52′ 44″ 30‴ serait l'obliquité de l'ecliptique ce qui est digne de remarque."

Si on calculait seule l'ombre du solstice d'hiver en supposant la déclinaison de 23^{d} 29′, on trouverait une latitude bien plus grande que par la hauteur solsticeal d'été.



Note B.

In illustration of the action of a Ray of Light or Shadow cast by a Gnomon into an enclosed Chamber for measuring Meridian Altitudes.

Du Halde's China. Folio, 1741. Vol. 2, p. 131.

Account of their Astronomy, description of the ancient Instruments at the Observatory, Pekin.

The Gnomon.

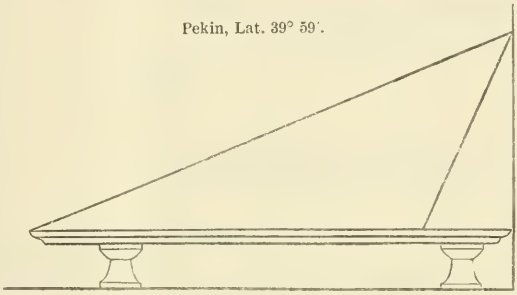
"They had contrived" (continued P. le Comte) "a gnomon in a low room close to it" (a court before mentioned, of no particular use). "The slit which the ray of the sun came through was about 8 feet above the floor, is horizontal, and formed by two pieces of copper borne up in the air; which, by turning, may be set nearer to or farther from each other, to enlarge or contract the aperture."

"Lower is a table, with a brass plate in the middle, on which was drawn a meridian line 15 feet long, divided by transverse lines, which are neither finished, nor very exact.

"There are small channels round the table, for holding water, so as to level it; and this was the most tolerable contrivance among them, or that could be of any use to a skilful observer."

Page 135.

"There was in the observatory a square column of brass 8 feet 3 inches high, erected on a table of the same metal 18 feet long, two broad, and an inch thick. This table, from the base of the column was divided into 17 feet; each foot into 10 parts, which they call inches; and each inch into 10 lesser parts, called minutes. Quite round along the edges was a small channel made in the brass, about half an inch broad, and of the same depth, which they filled with water, in order to bring the table to a parallel position. This machine formerly served to determine the meridian shadows, but the pillar was then much bended, and did not stand at right angles with the table."



Anaximander, according to Laertius, was the first Greek who adopted the use of gnomons, and placed them on the Sciothera of Lacedæmon, for the purpose of indicating the tropics and equinoxes.

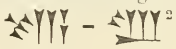
In Italy a simple form of Heliotropion may yet be seen in several churches. In Milan Cathedral a meridian line is marked on the pavement upon which an image of the sun is cast through an aperture in the southern wall; like the slit in the wall of the Observatory at Pekin, and on which it travels backwards and forwards at noon-day from solstice to solstice.[1]

[1] See also reference to a passage in the Odyssey, in "Messiah the Prince," 2nd edit., p. 179, concerning the turnings of the sun as exhibited in the island of Syra.

B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of Judah.	Chronology of the Kings of Israel.
788		.....	.....	12. Jeroboam ...
		The 27th year of Amaziah is fixed and equated with the Cyclical year B.C. 788–7. Because this Cyclical year is 50 years before B.C. 738–7, or 8th year of Tiglath-Pileser, which 8th year is equated with the 9th year of Menahem, B.C. 738–7. See p. 4.	27. Amaziah	13. „ „
787		.....	.....	.....
			28. „ „	
		Sabbatical[1] year begins in Tishri.		14. „ „
786		.....	.....	.....
			29. „ „	
		Year of Jubilee.[2] 5th Jubilee of the 3rd Cycle of 490 years. See p. 18.		15. „ „
785		.....	.....	.....
		"All the people of Judah took Azariah who was sixteen years old, and made him king instead of his father Amaziah." 2 Kings xiv, 21.	1. Azariah or Uzziah	16. „ „
784		.....	.....	.....
		Azariah, or Uzziah, brake down the wall of Gath, and the wall of Jabneh, and the wall of Ashdod, and built cities about Ashdod, and among the Philistines.	2. „ „	17. „ „
783		.....	.....	.....
		And God helped him against the Philistines and against *the Arabians* that dwelt in Gurbaal. 2 Chron. xxvi, 6, 7.	3. „ „	18. „ „

[1] See Leviticus, xxv, 2, 4.

[2] Ibid. xxv, 8, 9, 10, 11. In the year of Jubilee it is said that "ye shall return *every man* into his possession." Every man here of course means only every man dispossessed of his land. The fallow of the Jubilees did not affect the whole nation, but only every man who returned to his land. So that the year of Jubilee was a year of fallow for the few, but of cultivation for the many.

	Cycle of Belus.	Chronology of the Kings of Assyria.	Chronology of the Kings of Eponymous Archons.	Remarks, &c.
....		23.	.....	
		Iva-lush .. R. Bin-lihhis .. O. Vul-nirari .. S.	—Sil-Istar O. Rubu-Assuritu S.	Karru,[1] or Cycle, being the last year of the 25th Cycle of the Era of Belus. The original word is  [2] Kar ru.
....		24.	Balatu	
1				Beginning of the sixth Soss, of the third Neros, of the Cycle of Belus. A new temple erected to the god Nabo, and the beginning of the Cycle.
....		25.	Vul-upallit.	
2				
....		26.	Marduk-sar-usur.	
3				
....		27.	Nabu-sar-usur.	
4				
....		28.	Ninip-nazir.	
5				

[1] In the year "B.C. 788, the word cycle (Karru) is noted in the Canon." "Karru," in the year B.C. 788, translated Jubilee by Dr. Oppert, marks the last year of a Cycle. Dr. Haigh, Zeitschrift-Ægypt. Sprache, July, 1870. Rawlinson, Athenæum, Sept. 7, 1867.

[2] Cuneif. Insc., vol. ii, p. 52, l. 30.

B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of Judah.	Chronology of the Kings of Israel.
782		.....	.....	18 Jeroboam ...
		Uzziah built towers in Jerusalem at the corner gate, and at the valley gate. *v.* 9.	4 Azariah or Uzziah	19 „ „
781		.....	.....	.....
		Uzziah had an host of fighting men — mighty men of valour 2,600 : and under their hand an army 307,500.	5 „ „	20 „ „
780		.....	.....	.....
		—— And his name spread abroad : for he was marvellously helped till he was strong. *v.* 15.	6 „ „	
		Sabbatical year, 1.		21 „ „
779		.....	.....	.....
			7 „ „	22 „ „
778		.....	.....	.....
			8 „ „	23 „ „
777		.....	.....	.....
			9 „ „	24 „ „
776		This 10th year of Azariah was just 87 years before the 14th year of Hezekiah, 689, when Sennacherib threatened Jerusalem and attacked Sethos[1] in Egypt, who reigned till 685.	..... 10 „ „	..... 25 „ „

[1] Sethos, the priest of Vulcan, was king of Egypt when Sennacherib king of the *Arabians* and Assyrians attacked Egypt with a great army. The whole military force of Sethos forsook him on this occasion. From which fact it may be inferred that his power was at an end, and that B.C. 689 was towards the close of his reign. Herod. ii, 141.

Cycle of Belus.	Chronology of the Kings of Assyria.	Chronology of the Kings of Eponymous Archons.	Remarks, &c.
	29 Iva-lush ..	Il-va-liha.	
	1 Sallim - manu - uzur III.	Sallimmanu-usur the king.	
	2 " "	Samsi-il the Tartan.	
	3 " "	Maruduk - sallim - ani the Rabbi-turi.	
	4 " "	Bilsidi Prefect of the palace.	
	5 " "	Nabu - abad - ukin the Tukulu.	
	6 " "	Inu-assur-emur ..	B.C. 776, First year of the first Olympiad. Petubastes ("ἐφ' οὗ Ὀλυμπίας ἤχθη πρώτῃ") begins to reign in Egypt about this time,[1] *i.e.* in 774, the third year of the first Olympiad.

[1] Petubastes 40 B.C. 774
Osorcho 8 734
Psammus 10 726
Zet or Sethos 31 715
to
685 = 89 years.

[1] Africanus.

B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of Judah.	Chronology of the Kings of Israel.
775		.....	.....	Jeroboam ....
		Jeroboam king of Israel recovered Damascus and Hamath from Assyria, for Israel. 2 Kings xiv, 28.	11 Azariah or Uzziah	
	—			26 „ „
774		.....	.....	.....
			12 „ „	
	—			27 „ „
773		.....	.....	.....
			13 „ „	
		Sabbatical year, 2.		28 „ „
772		.....	.....	.....
			14 „ „	
				29 „ „
771		.....	.....	.....
			15 „ „	
	—			30 „ „
770		.....	.....	.....
			16 „ „	
	—			31 „ „
769		.....	.....	.....
			17 „ „	
	—			32 „ „

	Cycle of Belus.	Chronology of the Kings of		Remarks, &c.
		Assyria.	Eponymous Archons.	
.... 13		7. Sallim - manu - uzur	Ilu-alik-pani-ikmis	38th year of Sheshonk IV in Egypt.
.... 14		8 „ „	Assuritu-duri.	Petubastes begins to reign in Egypt in B.C. 774.
.... 15		9 „ „	Manu-ki-vul.....	Expedition to Damascus.
.... 16		10 „ „	Assur-bil-uzur.	
.... 17		1 Assur-dayan III.	Assur - dayan the king.	
.... 18		2 „ „	Samsi-il the Tartan.	
.... 19		3 „ „	Bil-ilai.	

B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of Judah.	Chronology of the Kings of Israel.
768		.....	.....	Jeroboam .....
			18 Azariah or Uzziah	
				33 „
767		.....	.....	.....
			19 „ „	
				34 „
766		.....	.....	.....
			20 „ „	
		Sabbatical year, 3.		35 „
765		Amos prophecies "in the days of Uzziah king of Judah, and in the days of Jeroboam... two years before the earthquake." Amos i, 1. Not long before the death of Jeroboam.	.....	.....
			21 „ „	
				36 „
764		"Jeroboam shall die by the sword, and Israel shall surely be led away captive." Amos vii, 11. See B.C. 760.	.....	.....
			22 „ „	
				37 „
763		"I will cause the sun to go down at noon, and will darken the earth in the clear day." Amos viii, 9. "Shall not the land tremble for this?... It shall be tossed up wholly as a flood, and cast down and subside like the flood of Egypt. viii, 8.	.....	.....
			23 „ „	
				38 „
762		"Earthquake in the days of Uzziah." Zechariah xiv, 5.[1]	.....	.....
			24 „ „	
				39 „

[1] ARGUMENT 1:—
Amos here speaks of a total eclipse of the Sun accompanied by a great earthqual before the death of Jeroboam. The only total eclipse of the Sun in this part the world, within fifty years, touching both Samaria and Gozan, is that of tl 15th June, B.C. 763, and that was accompanied by earthquakes.

	Cycle of Belus.	Chronology of the Kings of Assyria.	Chronology of the Kings of Eponymous Archons.	Remarks, &c.
...		4 Assurdayan III.	Paliya.	
0				
...		5 „ „	Gardi-assur.	
1				
...		6 „ „	Musallim-ninip.	
2				
...		7 „ „	Ninip-mukin-nisi Archon of Kirrur.	
3				
...		8 „ „	Zit-qi-il.	
4				
...		9 „ „	Bur-sagale Archon of Gozan.	Total eclipse of the Sun, 15th June, central shadow through Gozan.[1] An earthquake[2] in the city of Assur.
5				
...		10 „ „	Tabu-bil	An earthquake in the city of Assur.
6				

[1] See Vol. II, Part 1, p. 152, concerning this total eclipse of the Sun in the month Sivan.

[2] Zik-hu or Sik-hu. Compare זִיעַ to tremble, with the ן moveable.—Gesenius.

B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of Judah.	Chronology of the Kings of Israel.
761		.....	.....	Jeroboam ....
			25 Azariah or Uzziah	
				40 „
760		.....	.....	.....
		Death of Jeroboam. See B.C. 764. Probably overthrown by Pul.	26 „ „	
				41 „
759		"And the God of Israel stirred up the spirit of Pul king of Assyria (and the spirit of Tiglath-Pilnezer king of Assyria), and he carried them away," &c. 1 Chron. v, 26.	.....	.....
			27 „ „	1 Pul, who plac governors ov Samaria.
758		.....	.....	.....
		Sabbatical year, 4.	28 „ „	2 „
757		.....	.....	.....
			29 „ „	3 „
756		.....	.....	.....
			30 „ „	4 „
755		.....	.....	.....
			31 „ „	5 „

	Cycle of Belus.	Chronology of the Kings of Assyria.	Chronology of the Kings of Eponymous Archons.	Remarks, &c.
....		11 Assurdayan III	Nabu-mukinak....	Earthquake at Arbaχa.
27				
....		12 „ „	Lagibu	Earthquake at Arbaχa.
28				Pul,[1] or Phul, or φαλωχ, becomes king of Chaldea, and probably places a governor in Samaria.
....		13 „ „	Inu-assur-emur....	Earthquake at Gozan.
29				
....		14 „ „	Bel-taggil	"The land at rest," *i.e.* Earthquakes cease.
30				
....		15 „ „	Ninip-idin.	
31				
....		16 „ „	Bel-kasidua.	
32				
....		17 „ „	Kisu.	
33				

[1] See Vol. II, Part 1, p. 173.

B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of Judah.	Chronology of the Kings of Israel.
754		.....	..... 32 Azariah or Uzziah	6 Pul, who place governors over Sa maria
753		.....	..... 33 „ „	7 „ .....
752		.....	..... 34 „ „	8 „ .....
		Sabbatical year, 5.		
751		.....	..... 35 „ „	9 „ .....
750		.....	..... 36 „ „	10 „ .....
749		.....	..... 37 „ „	11 „ .....
748		"In the thirty-eighth year of Azariah king of Judah did Zechariah the son of Jeroboam reign over Israel in Samaria six months." 2 Kings xv, 8.	..... 38 „ „	12 „ ..... 1 Zechariah

	Cycle of Belus.	Chronology of the Kings of Assyria.	Chronology of the Kings of Eponymous Archons.	Remarks, &c.
...		18 Assurdayan III	Ninip-sezib-ani....	The capital removed from the city of El Assur. Pul becomes king of Assur, and Assur-nirari king of Nineveh (?).
4				
...		1 Assur-lihhis O. Assur-nirari S.	Assur - nirari the king.	
5				
...		2 „ „	Samsi-il the Tartan.	
6				
...		3 „ „	Maraduk - sallim - anni Prefect of the Palace.	
7				
...		4 „ „	Bildayan the Rabbi-turu.	
8				
...		5 „ „	Samas-ittalik - sum the Tukulu.	
9				
...		6 „ „	Vul - bil - ukin the Prefect.	
0				

B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of	
			Judah.	Israel.
747		"Shallum the son of Jabesh began to reign in the nine and thirtieth year of Uzziah, and he reigned a full month."	39 Azariah or Uzziah	Zechariah .....
		"In the nine and thirtieth year of Azariah king of Judah began Menahem to reign over Israel ten years." 2 Kings xv, 13, 17.		Shallum.
746		.....	.....	Menahem.....
		"Pul the king of Assyria came against the land, and Menahem gave Pul 1,000 talents of silver that his hand might be with him to confirm the kingdom in his hand." 2 Kings xv, 19.	40 „ „	1 „
745		.....	.....	.....
			41 „ „	2 „
		Sabbatical year, 6.		
744		.....	.....	.....
			42 „ „	3 „
743		.....	.....	.....
			43 „ „	4 „
742		.....	.....	.....
			44 „ „	5 „
741		.....	.....	.....
			45 „ „	6 „

Cycle of Belus.	Chronology of the Kings of			Remarks, &c.
	Assyria.	Eponymous Archons.	Babylon.	
	7 Assur-nirari .	Sin-sallim-anni.	1 Nabonassar. .	
	8 „ „ . .	Nergal-nazir . .	2 „	Earthquake in the city of Calah.
	Tukulti-pal-zara 1 Tiglath-Pileser	Nabu-bil-uzur. .	3 „	Tiglath - Pileser sits on the throne on the 13th day, 2nd month, B.C. 745. Campaign in Babylonia in 7th month.
	2 „ „	Bil - dayan Archon of Calah.	4 „	
	3 „ „	Tukulti-palzara the king.	5 „	
	4 „ „	Nabudanin-anni the Tartan.	6 „	
	5 „ „	Bil-karran bil-uzur.	7 „	

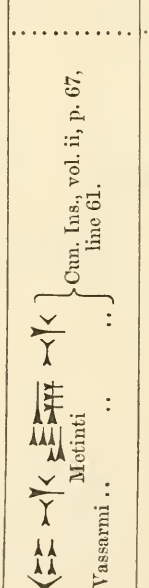
B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of Judah.	Chronology of the Kings of Israel.
740		.....	46 Azariah or Uzziah	Menahem .....
				7 „
739		.....	47 „ „	.....
				8 „
738		.....	48 „ „	.....
		Sabbatical year, 7. Menahem pays tribute to Tiglath-Pileser[1] in B.C. 738–7.		9 „
737		.....	49 „ „	.....
		Year of Jubilee. 6th of 3rd Cycle of 490 years. p. 18.		10 „
736		.....	50 „ „	.....
		In the 50th year of Azariah Pekahiah began to reign two years. 2 Kings xv, 23.		Pekahiah. 1 „
735		.....	51 „ „	.....
				2 „ 1 Pekah.
734		.....	52 „ „	.....
		In the 52nd year of Azariah Pekah began to reign 20 years. xv, 27. In the 2nd year of Pekah Jotham son of Uzziah king of Judah began to reign. xv, 32.	1 Jotham.	2 „

[1] ARGUMENT 2 :—
Menahem gave Pul 1,000 talents of silver in his first year.
Tiglath-Pileser succeeded Pul in the year B.C. 745.
Menahem pays tribute to Tiglath-Pileser in his eighth year, in B.C. 738–7.
B.C. 738–7 was therefore concurrent with the ninth year of Menahem.

Cycle of Belus.	Chronology of the Kings of			Remarks, &c.
	Assyria.	Eponymous Archons.	Babylon.	
	6 Tiglath-Pileser	Nabu-etur-anni the Rabbi-tuni	8 Nabonassar	
	..... 7 „ „	Sintaggil the Tukulu.	9 „	
	..... 8 „ „	Vul-bil-ukin ..	10 „	
	..... 9 „ „	Bil-emur-anni .	11 „	Tribute taken of Minikim, or Menahem, of Samarina, Rezin king of Syria, Hiram king of Tyre, Pisiris king of Carchemish, Eniel king of Hamath, Zabibi queen of the Arabians.[1]
	..... 10 „ „	Ninip-ilai	12 „	
	..... 11 „ „	Assur - sallim - anni.	13 „	
	..... 12 „ „	Bil-dayan	14 „	Expedition to Palestine (Pilisti). Osorkon begins to reign in Egypt in B.C. 734, for 8 years.,

[1] See Annals of Tiglath-Pileser by George Smith. Zeitschrift Ægypt. Sprache, . 1869.

B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of: Ascalon and Tabal.	Damascus and Carchemish.	Judah.	Israel.
733		"And Uzziah *the king* was a leper unto the day of his death. And Jotham his son was over *the king's* house." 2 Chron. xxvi, 21.	Metinti king of Ascalon. Vassarmi king of Tabal.	Rezin king of Damascus. Pisiris king of Carchemish.	2 Jotham and Uzziah or Khuzzi-yahu.	Pekah....
	—					3 "
732		.....			.....	.....
					3 "	
	—					4 "
731		Khuzzi-yahu, or Uzziah, pays tribute to Tiglath-Pileser, under his tributary title, Yahu-khuzzi.[1]	.....	.....	.....	.....
					4	
		Sabbatical year 1.				5 "
730		.....	.....	.....	.....	.....
					5	
						6 "
729		.....				.....
					6	
	—					7
728		.....	Cun. Ins., vol. ii, p. 67, line 61.			
			Metinti		7	8
	—					
727		.....	Vassarmi ..	not named as tributaries in the tablet of B.C. 731. Rezin, Pisiris	8	9
	—					



[1] ARGUMENT 3 :—
Khuzzi-yahu or Uzziah, as a leper, was still king of Judah, while Jotham was over the king's house, in the time of Kinzirus at Babylon, B.C. 731. Jotham, therefore, did not begin to reign in B.C. 758.

Cycle of Belus.	Chronology of the Kings of							
	Assyria.	Eponymous Archons.	Babylon.	Ethiopia and Egypt.	Sidon and Tyre.	Arabia.	Hamath.	Gaza.
	13 Tiglath-Pileser	Assur-danin-anni	1 Nabius	2 Osorcho	4 Iluleus			
	..... 14 „	Nabu-bel-uzur	2 „	3 Osorko king of Egypt.	5 Ludya king of Tyre.	Samsi queen of Arabia.	Eniel king of Hamath.	Hanun king of Gaza.
	..... 15 „	Nergal-u ballid	1 Kinzi-rus[1] and Po-rus	4 „	6			
	..... 16 „	Bel-lu dari	2 „	5 „	7			
	..... 17 „	Nap-har-ili	3 „	6 „	8			
	..... 18 „	Dur-assur	4 „	7 „	9 Annals of Sennacherib, p. 53.		Cun. Ins., vol. ii, p. 67, line 58.	Cun. Ins., vol. ii, p. 67, line 62.
	19 Tiglath-pileser	Bel-Harran beluzur	5 „	8 „	10 Ludiya. Lu . li . i	Samsi.	Eniel	Hanunu
	Soss 7. Neros 3.							
	Shalmanezer							

[1] The war between Kinziru, or Chinzurus and Tiglath-Pileser is contained in Cun. Ins., vol. ii, p. 67, lines 23, 25; and Yahukazi, named in line 61, *then paid tribute*, that is, about the year B.C. 732, or 731. See Transactions, vol. i, p. 85.

Merodac Baladan, son of Yakin, paid tribute in B.C. 731, and was probably the father of "Merodac Baladan son of Baladan" in the days of Hezekiah, B.C. 688.

B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of			
			Ascalon and Tabal.	Damascus and Carchemish.	Judah.	Israel.
726		.....	Metinti king of Ascalon.	Rezin king of Damascus. Pisiris king of Carchemish.	9 Jotham and Uzziah	Pekah ...
						10 „
725		.....			.....	.....
					10 „	
						11 „
724		"In the year that king Uzziah died .... Go and tell this people, Hear ye indeed but understand not .... .. Until the cities be wasted without inhabitant and the house without man and the land be utterly desolate." Isaiah vi, 1, 11.	.....	.....	.....	.....
				Can. Ins., vol. iii, p. 9, line 50.	11 „	
						12 „
723			.....		.....	.....
					12 „	
						13 „
722		.....	.....		.....	.....
					13 „	
						14 „
721		.....	.....	Ra - sa - a - nu	.....	.....
					14 „	
						15 „
720		.....	.....	.....	.....	.....
			Metinti.	Rezin. Pisiris.	15 „	
						16 „

[1] And this is what is written in the Archives concerning Shalmanezer king of Assyria. One whose name was Elulæus reigned 36 years: this king on the revolt of the Citteans reduced them to submission. Against these did the king of Assyria send an army, and in a hostile manner overran all Phenicia, but soon made peace and returned. But Sidon, and Aea, and Palætyrus revolted, and many other cities delivered themselves up to the king of Assyria—when the Tyrians would not submit,

Cycle of Belus.	Chronology of the Kings of						
	Assyria.	Eponymous Archons.	Babylon.	Sidon and Tyre.	Arabia.	Hamath.	Gaza.
	20 Tiglath-Pileser and Shalmanezer[1]	Maruduk-bel-uzur	1 Ilulaeus	11 Eluleus	Samsi, queen of Arabia.	Fastes de Sargon, plate 2, line 12.	Hunan king of Gaza.
	21 ,,	.....	2 ,,	12 Luliah, king of Sidon. Metenna, king of Tyre.			
	22 ,,	Assur-Kalli	3 ,,	13 Cun. Ins., p. 67, line 66.			
	23 ,,	Sallimmanuzur the king	4 ,,	14			
	24 ,,	Ninip-ilai Sargon receives a throne	5 ,,	15 Metenna	Fastes de Sargon, plate 2, line 6.	Yahubihidi.	
	25 ,,	Nabu-taris	1 Mardocempadus	16 Luliah, or Eluleus.	Sa - am - si - i	Yahubihidi king of Hamath conquered by Sargon B.C. 720.	Hanunu king of Gaza.
	26 ,,	Assur-izka danin	2 ,,				

he Phœnicians furnished him with 60 ships, and 800 men to row them. Then the Tyrians came upon them in 12 ships—and took 500 men prisoners. And the reputation of the citizens of Tyre was increased. But the king of Assyria returned, and placed guards at the rivers and aqueducts to hinder the Tyrians from drawing water. This continued for five years. Nevertheless the Tyrians bore the siege, and drank of the waters out of the wells they dug.—Josephus, Ant. ix, xiv, 2.

B.C.	Sabbatical years and Jubilees	Remarks, &c.	Chronology of the Kings of			
			Tabal and Ascalon.	Damascus and Carchemish.	Judah.	Israel
719		.....	Metinti king of Ascalon.	Rezin king of Damascus.	16 Jotham	Pekah
						17 „
718		"And it came to pass *in the days of Ahaz*"——"The head of Syria is Damascus, and the head of Damascus is Rezin; within 65 years shall Ephraim be broken, that it be not a people." Isaiah vii, 1, 8.			..... 1 Ahaz ..	.....
						18 „
717		"For before the child shall have knowledge to cry, my father and my mother, the riches of Damascus and the spoil of Samaria shall be taken away before the king of Assyria." viii, 4.	Xulli king of Tabal.	king of Carchemish.	..... 2 „	.....
						19 „
716		Sabbatical year, 3.	Ambaris son of Xulli carried away captive by Sargon in B.C. 716. Fastes de Sargon, p. 4.	Rezin conquered and slain by Tiglath-Pileser in the year B.C. 715, confederate with Yahubidi of Hamath. Fastes de Sargon, p. 4; 2 Kings xvi, 9.	..... 3 „	.....
		"For he saith (*i.e.* the king of Assyria) are not my princes altogether kings?" x, 8.				20 „
715		"Is not Calno as Carchemish? Is not Hamath as Arpad? Is not Samaria as Damascus? Shall I not, as I have done unto Samaria and her idols, so do to Jerusalem and her idols." x, 9, 10, 11.[1]		Pisiris king of Carchemish conquered by Sargon B.C. 717. Les Sargonides, p. 19.	..... 4 „	Pekah king of Samaria conquered by Tiglath-Pileser, B.C. 715, confederate with Yahu-
714		.....	Metinti still on the throne.		..... 5 „	
		"And king Ahaz went to Damascus to meet Tiglath-Pileser king of Assyria." 2 Kings xvi, 10.				
713		.....			..... 6 „	

[1] ARGUMENT 4:—

Carchemish was taken in .. .. B.C. 717
Hamath was taken in 715
Samaria and Damascus were taken towards the beginning of the reign of Ahaz: not however till after the revolt of Yahubidi in .. 715
Ahaz did not therefore begin to reign so early as 742

Cycle of Belus.	Chronology of the Kings of						
	Assyria.	Eponymous Archons.	Babylon.	Egypt.	Arabia.	Hamath.	Gaza.
	27 Tiglath-Pileser, Shalmanezer, and Sargon	Sargina the king	3 Mardoc-empadus	Sabahe, the Tartan, or general of the forces of Egypt, compelled to fly at the battle of Raphia, B.C. 720. Fastes de Sargon, p. 4. Sethos begins to reign in 715.			
	28 „	Ziru-bani .	4 „				
	29 „	Tabu-sar-assur the great Tukulu	5 „				
	30 „	Tabu-zillizara prefect of Assur	6 „	Biirchu, or Bocchoris, set on the throne of Egypt in B.C. 715 pays tribute to Sargon. Fastes de Sargon, p. 4.	Samsi queen of the Arabians pays tribute to Sargon in B.C. 715. Les Sargonides, p. 19.	Yahubidi king of Hamath[1] conquered by Sargon in B.C. 715. Fastes de Sargon, p. 4. Rezin, Pekah, and Yahubidi in confederacy.	Hanunu king of Gaza was conquered at the battle of Raphia, B.C. 720, and taken prisoner by Sargon. Fastes de Sargon, p. 4.
	31 „	Taggil-anabil prefect of Nazibira	7 „	1			
	32 „	Assuritu-duri prefect of Arbaχa	8 „	2			
	33 „	Assur-bani prefect of χalki	9 „	3			

[1] 'Iaoubid d'Hamath auparavant..... n'était pas légitime maître du trône : homme
èle et empie, il avait convoité la royauté d'Hamath. Il excita contre moi les villes
pad, de Simyra, de Damas, et de Samarie ....."

B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of		
			Ashdod and Ascalon.	Judah.	Israel.
712		.....	Yamin king of Ashdod in B.C. 711.	.....	From the fall of Pekah in the fourth year of Ahaz, called the 20th year of Jotham (2 Kings xvi, 30) governors seem to have been appointed by the Assyrians who collected the tribute. Hoshea became servant to Shalmanezer and gave him presents. 2 Kings xvii, 3.
				7 Ahaz	
711		"In the year that the Tartan came to Ashdod, on the sending of Sargon king of Assyria with him, and he fought against Ashdod and took it." Isaiah xx, i.		.....	
				8 „	
710		.....	.....	.....	
				9 „	
709		Sabbatical year, 4		.....	
				10 „	
708		.....	Metinti king of Ascalon.	.....	
				11 „	
707		.....	Metinti made king of Ashdod; Sargon deposes	.....	.....
				12 „	
706		"In the twelfth year of Ahaz, king of Judah began Hoshea the son of Elah to reign in Samaria nine years."	Zedek becomes king of Ascalon, say in B.C. 710.	.....	Hoshea
		Hoshea the Assyrian governor of Samaria, supported by Sabaco or So, is set up as king.		13 „	1 „

Cycle of Delus.	Chronology of the Kings of				Remarks, &c.
	Assyria.	Eponymous Archons.	Babylon.	Egypt.	
	16 Shalmaneezer and Sargon	Sarru-emur-anni	10 Mardoc-empadus	4 Bocchoris 4	
	17 „	Ninip-alik-pani	11 „	5 „ 5 Sethos or	
	18 „	Samas-bil-usur	12 „	6 „ 6	
	19 „	Mannu-ki-assur liha	1 Archeanus or Sargon.	7 „ 7 Sabaco or So	Sabaco the Ethiopian having captured Bocchoris burns him alive. Manetho.
	20 „	Samas-upaχχir prefect of Yelruri	2 „	1 „ 8	
	21 „	Sa-assur-gubbu prefect of Tusχan	3 „	2 „ 9	
	22 „	Mutaggil-assur prefect of Gozav	4 „	3 „ 10 Sethos	

B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of Ashdod and Askalon.	Judah.	Israel.
705		.....	Mitinti king of Ashdod.	Ahaz	Hoshea
				14 „	
					2 „
704		.....		.....	.....
				15 „	
					3 „
703		"In the year that king Ahaz died was this burden.... Rejoice not thou, whole Palestina, because the rod of them that smote thee is broken (that is because Sargon the rod of Assyria is dead) for out of the serpent's root shall come forth a cockatrice" (that is Sennacherib the son of Sargon).		.....	.....
				16 „	
					4 „
702		Sabbatical year, 5. "In the first year of his (Hezekiah's) reign. in the *first month* he opened the doors of the house of the Lord and repaired them." 2 Chron. xxix, 3. "And there assembled at Jerusalem much people to keep the feast of unleavened bread in the *second month*." xxx, 13. "In the *third month* they began to lay the foundation of the heaps"—till the seventh month. xxxi, 7.	Zedek king of Ascalon.	Hezekiah	.....
				1 „	
					5 „
701		"After these things, and the establishment thereof, Sennacherib king of Assyria came, and entered into Judah,[1] and encamped against the fenced cities." xxxii, 1. Hezekiah now stopped all the fountains. "Why should the *kings of Assyria*[2] come and find much water?" *v.* 4.	Sennacherib, who carries away captive in B.C. 701.	.....	.....
				2 „	
					6 „
700		.....		.....	.....
		"And the king of Assyria found conspiracy in Hoshea: for he had sent messengers to So king of Egypt." 2 Kings xvii, 4.		3 „	
					7 „
699		.....		.....	.....
		"And it came to pass in the fourth year of king Hezekiah, which was the seventh year of Hoshea son of Elah king of Israel."		4 „	
					8 „

Mitinti king of Ashdod pays tribute to Sennacherib in B.C. 701. Records of the Past, vol. i, p. 35.

Saludari made king of Ascalon by Sennacherib in B.C. 701.

[1] ARGUMENT 5:—

1. Assyrian evidence shows that Sennacherib came up against Hezekiah in his third campaign, B.C. 701.
2. Hebrew evidence shows that it was in the second year of Hezekiah that Sennacherib came against him for the first time.
3. When the reign of Hezekiah is lowered 25 years, the second of Hezekiah B.C. 701, coincides with the third campaign of Sennacherib, B.C. 701.

[2] "Kings of Assyria," that is Shalmanezer and Sennacherib.

	Cycle of Belus.	Chronology of the Kings of				Remarks, &c.
		Assyria.	Eponymous Archons.	Babylon.	Egypt.	
.. 3		23 Shalmaneezer and Sennacherib	Paxirrabil	5 Archeanus	4 Sabaco or So	
.. 4		24 „ 1	Nabu-daniipus	1 Interregnum	5 „ 12 Sethos	"In the beginning of my (*i.e.* Sennacherib) reign I defeated Merodac Baladan king of Babylonia"——89 large cities and royal dwellings, and 820 small towns in the neighbourhood I assaulted, captured, and carried off their spoils." Bellino's Cylinder.
.. 5		25 „ 2	Ganrubai prefect of Quazi	2 „	6 „ 13	
.. 6		26 „ 3	Nabu-liha prefect of Arbela	1 Belibus	7 „ 14	The inscription on Bellino's Cylinder, written in the year when Nabuliha was Archon, speaks of Belibus being made king, in B.C. 703: and of his second expedition in 702 against Chaldea and the Kassi, or people of Susiana. Nothing is said concerning Palestine or Hezekiah.[1]
. 7		27 „ 4	Xananu ..	2 „	8 „ 15	Sennacherib's third campaign against Hezekiah, in the year B.C. 701, is described on Taylor's Cylinder.[2]—Luliah, or Eludæus is put to flight.—46 of Hezekiah's strong cities are taken: and he pays 30 talents of gold and 800 of silver.
. 8		28 „ 5	Mitunu prefect of Isana	3 „	9 „ 16	In Sennacherib's fourth campaign Merodac Baladan fled to Beth-Yakina, and to the sea coast (Persian Gulf). "On my return," says Sennacherib, "Assur-nadin-mu, (Apro-nadius) my eldest son, I seated on the throne of his kingdom." Taylor's Cylinder.
.. 9		29 „ 6	Bel-saranni prefect of Kurban	1 Apronadius	10 „ 17 Sethos	

[1] This inscription is translated by Mr. Fox Talbot in vol. i, p. 25, of Records of the Past.

[2] The inscription relating to the third campaign is translated by Mr. Fox Talbot, vol. i, p. 35, of Records of the Past.

B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of		
			Ashdod.	Judah.	Israel.
698		"Shalmanezer king of Assyria came up against Samaria and besieged it. And at the end of three years *they* (that is the kings Shalmanezer and Sennacherib) took it"—2 Kings xviii, 9.		5 Hezekiah	Hoshea
					9 "
697		"even in the sixth year of Hezekiah, that is the ninth year of Hoshea king of Israel, Samaria was taken."[1] *v.* 10.	.....	.....	
				6 "	
696		"And the king of Assyria did carry away Israel into Assyria, and put them in Halah and in Habor by the river of Gozan, and in the cities of the Medes." *v.* 11.	.....	.....	
				7 "	
		Sabbatical year, 6.			
695		.....	.....	.....	
				8 "	
694		After the unsuccessful attempt of Sennacherib against Jerusalem in the second year of Hezekiah, B.C. 701, which the Book of Kings dismisses with the words, "he rebelled against the king of Assyria and served him not."—2 Kings xviii, 7. Hezekiah remained undisturbed by the Assyrians till his fourteenth year B.C. 689.—xviii, 13. Shalmanezer meanwhile was besieging Tyre and Samaria. Sennacherib having taken command of the armies in the East. Shalmanezer having taken command in the West.	.....	.....	
				9 "	
693			.....	.....	
				10 "	
692			.....	.....	
				11 "	
					The year B.C. 696-5 is the last of the kingdom of the Ten Tribes.[2] They "shall abide many days without a king, and without a prince, and without a sacrifice."—Hosea iii, 4. "Shalman," (or Shalmanezer) shall spoil Bethel.—x, 14. The calf of Bethel, called Beth-aven, "shall be carried unto Assyria, a present to king Jareb," or Sennacherib.—x, 5, 6.

[1] ARGUMENT 6:—
Demetrius says..... that from the time when the Ten Tribes were carried away from Samaria to the reign of the 4th Ptolemy was 473 years and 9 months = B.C. Feb. 695.—Clemens. Alex. Strom. 1.

[2] ARGUMENT 7:—
Caraite tombstones in the Crimea place the captivity in the year 696, see p. 28.

Cycle of Belus.	Chronology of the Kings of				Remarks, &c.
	Assyria.	Eponymous Archons.	Babylon.	Egypt.	
	30 Shalmanezer and Sennacherib 7	Salli-mu-sarri	2 Apronadius or Ashurnadinmu	11 Sabaco or So Sethos	Taylor's Cylinder is dated on the 20th day of the month Adar, that is the month of March, B.C. 691, when Billimmi-ani was Archon at Carchemish: and from the third campaign of Sennacherib against Hezekiah in B.C. 701, to March, 691, Sennacherib did not go up against Jerusalem. His wars were directed against Babylon and Elam: and Shalmaneczer we find was occupied during 698, 697, and 696 in besieging Samaria, from whence he sent the Golden Calf of Bethel to Sennacherib.
	31 „ 8	Nabu-dur-uzur	3 „	12 „ 19	
	32 „ 9	Salmu-ana-bil	4 „	1 Sevechus or Sethos 20	
	33 „ 10	Assur-bil-uzur	5 „	2 „ 21	
	34 „ 11	Il-ki-ya, Archon of Damascus	6 „	3 „ 22	
	35 „ 12	Iddin-achi	Regebelus	4 „ 23	
	36 „ 13	Zazai, Archon of Arpad	1 Mesesi-mordac	5 „ 24	

B.C.	Sabbatical years and Jubilees.	Remarks, &c.	Chronology of the Kings of Judah.
691		.....	12 Hezekiah ....
690		"In those days Hezekiah was sick unto death."—"Then came the word of the Lord to Isaiah, saying, Go and say to Hezekiah, thus saith the Lord ..... I will add unto thy days fifteen years..... and this shall be a sign..... Behold I will bring again the shadow of the steps, which has gone down on the steps of Ahaz, ten steps backward. So the sun returned ten steps by which steps it was gone down." Isaiah xxxviii, 8.[1]	13 " ....
689		"Now in the 14th year of king Hezekiah did Sennacherib king of Assyria come up against all the fenced cities of Judah."	14 " ....
		Sabbatical year, 7.	
688		"Thus saith the Lord..... I will defend this city[2] to save it for my own sake." 2 Kings xix, 34. "And this shall be a sign unto thee, ye shall eat this year such things as grow of themselves."	15 " ....
		Year of Jubilee, 7.	
687		"And in the second year that which springeth of the same."[3]	16 " ....
		"The princes of Babylon sent unto Hezekiah to inquire of the wonder that was done in the land."[4]	
686		.....	17 " ....
685		.....	18 " ....

[1] ARGUMENT 8 :—
The 14th year of Hezekiah is fixed by the solar eclipse of B.C. 689, January 11.

[2] ARGUMENT 9 :—
The Sabbatical year and Jubilee came together once only in fifty years. And the words of the prophet imply two fallow years in succession, in B.C. 688–687.

Cycle of Belus.	Chronology of the Kings of					Remarks, &c.
	Assyria.	Eponymous Archons.	Babylon.	Egypt.	Ethiopia.	
37	37 Shalmaneezer and Sennacherib	14 Billimmiani, Archon of Carchemish	2 Mesesimordac	Sevechus 6 or 25 Sethos	Tirkakah is king of Ethiopia; did not reign over Egypt till B.C. 684 or 683.	
38	38 „	15 Nabu-ukin-uzur	3 „	7 „ 26		"In the palace buried under the mound of Nebbi-Yunas there are records of a later campaign of Sennacherib against Palestine, about the year B.C. 690." George Smith, Vol. 2, Part 2, p. 327.
39	39 „	16 Gichilu	4 „	8 „ 27		
40	40 „	17 Idin-akhi	1 Interregnum	9 „ 28		
41	"And when Enemessar was dead Sennacherib his son reigned in his stead," that is, in B.C. 687. Tobit i, 15.	18 Sin-akhi-irba the king	2 „	10 „ 29		The Book of Tobit seems to refer to a third invasion of Judah by Sennacherib not long before the close of his reign, somewhere about B.C. 681, of which there is no account in the Book of Kings. Tobit i, 21.
42		19 Bilimmiani the Tartan	3 „	11 „ 30		
43		20 Assur-danin-ani	4 „	12 „ 31		

[3] ARGUMENT 10:—
Demetrius places the retreat of Sennacherib 466 years and 9 months before the 4th Ptolemy, *i.e.*, in February, B.C. 688.

[4] ARGUMENT 11:—
The message of the princes of Babylon was probably sent when there was no king, *i.e.*, during the interregnum, 687.

In conclusion:—The result of our reasoning is—

That the autumn of the year B.C. 688, or 15th year of Hezekiah, is fixed with astronomical certainty as the commencement of a central year of Jubilee, from which all other years of Jubilee may be computed.

That counting upwards from that date we arrive with exactness at the year B.C. 1962, as the commencement of the first cycle of 490 years, or ten periods of Jubilee, or 70 weeks of years, being the year of donation of the land of Canaan to Abraham and his seed, as a perpetual possession.

That the tenure of that land was the peculiar subject of the institution and the provisions of this sacred cycle, which, as J. G. Frank has truly observed, was an Astronomical Cycle, forming the foundation of all chronology.[1]

That counting again upwards from B.C. 1962, the time of the Flood of Noah becomes fixed, as we have seen,[2] to the year B.C. 2379. And the date of man's creation, according to Moses, to the year B.C. 4035.

That coupling this Astronomical Cycle with the Cycle of Belus, also astronomical, we are led by Berosus, the priest of Belus, to the same year B.C. 2379, as the date of the Flood.

That counting downwards from the central year B.C. 688, we are led to the autumn of B.C. 492, or first year of Darius son of Hystaspes, "as set over the realm of the Chaldeans" at about the age of 62, as the commencement of a notable period of Jubilee, when the Jews returned into possession of their own land, after exclusion for 70 years, and laid the foundation of their second temple in the second year of Darius=B.C. 492–1: this year being spoken of by one of the earliest Jewish writers, Rabbi Eliezer, as a year of Jubilee.[3]

And thus we are brought down into the days of Daniel the Prophet, and Minister of Darius, and to the Book which bears his name, containing marvellous computations put forth in both these forms of Cycle, concerning events of future days.

It has been the vain boast of modern criticism to have proved, as it believes, that the Book of Daniel is neither more

[1] Novum Systema Chronologiæ fundamentalis, Cyclo jubilæo-Biblico Detectæ, Gottingen, 1778, quoted by Dr. B. Zuckermann in his Treatise on the Sabbatical Cycle, and the Jubilee, p. 22. Vorst's Latin translation, anno 1644.

[2] Page 19. [3] See Pirke of Rabbi Eliezer, p. 101.

nor less than a forgery of the days of Antiochus Epiphanes, and that he therefore who assumes the character of prophet in that Book was one of the most daring of impostors that ever came into the world. The genuineness, or otherwise, of the Book, is one of the most interesting and vital questions in Biblical Archæology mooted in the present day: and I trust that this Society may be the means of disposing of many of the objections which have been raised against it: and of showing from ancient monuments and records brought from the country where Daniel professes to have lived and to have written, that he was acquainted with minute details of history which have reached us from no other historical source, proving that he lived indeed in the days of which he speaks.

I suggest that when the Book is looked upon as a Liturgy, compiled from the writings of Daniel, in the days of Epiphanes, with its Hymn of the Three Children attached, as in the Greek, together with a chapter of pure secular history, applying one of the great prophecies of future days to current events in the reign of Epiphanes, with some appearance of probability, though by no means so intended to be foretold, that the whole of the most weighty difficulties fall at once to the ground.[1] I would now desire to impress on those who are willing to undertake the study of Daniel's prophetic numbers, that having been brought up in Babylon he has adopted the practice of the Babylonians of computing distant times in periods of cycle, using throughout days for years,[2] as the priest of Belus, we have seen, spoke of years[3] for days; sometimes writing in Hebrew, sometimes in Chaldee: sometimes computing in the Sacred Cycle of the Jubilee in periods of 7, 49, and 490 years: sometimes in the Babylonian cyclical period of 360 days, or years.[4]

One of the most wonderful and accurate of Daniel's periods, is computed from the completion of the second temple, chap. ix, 25: from the "going forth," or execution of the decree of Cyrus, in the month Adar of the sixth year of Darius,[5] B.C. 486, counted from his accession to the throne

[1] This view is fully discussed in "Messiah the Prince."

[2] There is one instance only of the expression "weeks of days." Chap. x, 2.

[3] See p. 16. [4] See p. 15. [5] Ezra vi, 14, 15.

of Babylon in B.C. 492–1. And this date falls within the reign of Xerxes then associated with his father on the throne, under the title Artaxerxes. His words foretell the accomplishment of 69 weeks of years to the birth of Messiah in the Sabbatical year B.C. 3–2, and enable us to fix the end of the 70th Week or 490th year from that date in A.D. 5–6. From which again we compute the remaining series of sacred cycles of 490 years from the time of Christ to beyond the present time.

CYCLE OF THE JUBILEE OF 49 YEARS; and of Ten Jubilees of Seventy Weeks, or 490 years.

The Call of Abraham when dwelling in Ur of the Chaldees before he dwelt in Charran, at about the age of 65 B.C.	1962
490 years from thence to the appearance of Jehovah to Moses on Mount Horeb	1472
490 years from thence to the dedication of the Temple of Solomon	982
490 years from thence to the first year of Darius, son of Hystaspes, at Babylon at the age of about 62	492

"Postquam autem devastatum fuit templum (primum) periit quoque hic computus, quia abolitus fuerat. Hinc terra relicta fuit deserta 70 annis, et exstructum fuit templum secundum ..... Anno vero septimo ab ædificatione ejus ascendit Ezras, ac secundo reduxit vel restituit (illam æram Jubilæam) atque ab illo anno (B.C. 486) exorsi sunt supputare aliam æram, et constituerunt annum 13 æræ templi secundi sabbaticum." *i.e.* B.C. 472–1.[1]

CYCLE OF THE JUBILEE OF 490 YEARS.
Under the Second Temple.

490 years from B.C. 486 to .... A.D.	5
490 years from thence to	495
490 years from thence to	985
490 years from thence to	1475
490 years from thence to	1965

"Blessed is he that waiteth and cometh to the thousand three hundred and five and thirty days", or years = A.D. 1965.[2] Dan. xii, 12.

[1] Maimonides de Shemitha et Jubilæo. [2] See p. 15.

THE THIRD SALLIER PAPYRUS,

CONTAINING THE WARS OF RAMSES II AGAINST THE CHETA.

Translated with Notes by PROFESSOR LUSHINGTON.

Read 6th January, 1874.

THE Third Sallier Papyrus contains portions of a triumphal record, which was also engraved on several monuments in various parts of Thebes, and of which a somewhat differing version is found at the rock temple of Abusimbel. The sculptured scenes of battle, rout, and triumph, are as usual accompanied by a description of the events carved in hieroglyphic characters; their common subject is the victory gained by Ramses II over the Cheta prince and his allies, who had first succeeded in separating him from the main divisions of his army, and forced the king's troops to give way before them. The inscription on the west side of the first pylon of the Ramesseion, in its northern half, relates at length the deception practised by two spies employed by the Cheta prince, and more briefly the partial success of the Cheta, followed by their entire defeat and submission; a tale which is repeated in almost identical phrases throughout at the Great Cave of Abusimbel (Leps. Denk. 3, 153 and 187). The same pylon, on its southern half, in a shorter eulogy of Ramses, contains sentences corresponding with minute verbal accuracy to several which occur in the larger Ramesseion and Abusimbel inscriptions (Leps. Denk. 3, 161 and 165).

The monumental records tallying most closely with the Third Sallier Papyrus are but preserved in a state of deplorable mutilation. They are the following:—1st. The *Karnak* text, found on the south wall of Ammon's Sanctuary at

Carnak, of which part is given by Brugsch in his "Recueil de Monuments Égyptiens," pl. 29 to 32. Forty-six fragments of vertical columns or lines, of which the lower portion had become invisible, are here published; we learn from the late Vicomte de Rougé ("Recueil de travaux relatifs à la philologie et à l'archéologie Égyptiennes et Assyriennes," Paris, 1870) that M. Mariette has by removal of rubbish discovered the remains of 73 lines, still defaced by imperfections. In spite of this deficiency the publication of this rescued portion must be eagerly awaited by all interested in Egyptian studies. 2nd. The *Luxor* text, on the north face of the Pylon of Ramses the Second's Temple at Luxor (Brugsch, "Recueil," pl. 40-42), has fragments of 57 lines similarly incomplete. Here, too, the researches of M. Mariette are said to have partially restored to light 90 lines, but the ends of the last lines still remain buried. Brugsch's extract commences like the Ramesseion and Abusimbel inscriptions, with the date, "Year 5, Epiphi day 9, reign of," &c., and, for the first twenty lines at least, keeps pace with these rather than with the Papyrus. 3rd. A still more fragmentary relic, on the south face of this Luxor Pylon, is given by Brugsch, "Recueil," pl. 53, 16 lines. M. Mariette has again the credit of having recovered some additional fragments.

Our papyrus, as published by the Trustees of the British Museum, contained eleven pages (Select Papyri, 24-34). An additional page has recently come to light, which immediately preceded the first page as before known, and is computed by De Rougé to have been the second of the papyrus when complete. Having been the property of M. Raifet, from whose family it past into the possession of the Louvre, it is entitled the "Raifet Papyrus." A facsimile and translation are given by De Rougé in the "Recueil de travaux," &c. Many of the lines are still so imperfect that some readings must remain doubtful, and can only be supplied by conjecture. He there expresses his conviction, founded on comparison of the different texts, that our papyrus is a very bad copy of an excellent original, full of inaccuracies. It is to be hoped that the edition of all the fragments, announced as about to form part of his Chrestomathy, may be shortly rendered

accessible to students by M. Jacques de Rougé, a worthy inheritor of the name which his father's ability raised to such eminence. The first, and it is believed also the last, critical treatment of this document at large are both due to Dè Rougé, who in 1856 translated a large portion of what was then known to exist, and has again given a version of the whole, with some introductory remarks and short notes, in the "Recueil de travaux," above mentioned. Mr. Goodwin, in a memorable article of the Cambridge Essays for 1858, also translated a considerable part of the papyrus. Copious extracts have been quoted in various works of Brugsch, Mariette, and Dümichen. In the "Revue Archéologique" for 1858, M. Chabas translated, with analytical comments, the inscription of Abusimbel, supplementing it by the aid of the Ramesseion text.

The author of the following version gratefully acknowledges his obligation to those eminent scholars; without guidance such as theirs, he could not have ventured to undertake his present task, which he knows too well is very imperfectly accomplished.

The Poem of Pentaur is a name frequently given to this composition; I have abstained from using it, as I have met with no evidence adduced to show that it was written in metre. Notwithstanding its imaginative and highflown expressions, I fully assent to the justice of Mr. Goodwin's view, that "some such occurrence as that which it represents really took place." How far the victory won over the Cheta was due to the single-handed heroism of Ramses we are no more entitled to inquire than to demand from Homer his authority for the number of foemen whom Achilles slew. A picture not wholly unlike in some features, of a peril which encompassed the Achilles of a later day, may be cited, in conclusion, from authentic history, recorded by a great writer of prose epics:—

"Nearly all the European officers were now slain or wounded, and several times the Sepoys, wanting leaders, slowly receded: but the general, a skilful horseman and conspicuous from his peculiar headgear, was always at the point of greatest pressure, and then manfully the swarthy

soldiers recovered the lost ground. Once he was assailed by a chief, but on the instant Lieut. M. was at his side and slew the Sirdar . . . . At another period of the fight he was alone for several minutes in the midst of the enemy; they stalked around him with raised shields and scowling eyes, but whether from some appearance affecting their minds—for the Beloochs are very superstitious—or from some other cause, none lifted sword against him, and he returned to his own people unhurt. The 22nd soldiers, seeing him thus emerge from a crowd of foes, called to him by name and gave him a cheer heard distinctly above the general din of the battle."—Napier's "Conquest of Scinde," 1845, p. 313.

Raifet Fragment.

LINE

1. Several days after that King Ramses was in the town Ramses Miamon;
2. moving northward he reached the border of Katesh; then marched onward like his father
3. (Mentu, towards) Hanruta (Orontes). The 1st brigade of Ammon, that brings victory to King Ramses (accompanied him),
4. he was nearing the town; then the vile chief of Cheta came; he gathered (forces)
5. from the margin of the sea to the land of Cheta; came all the Naharina, the Airatu,
6. the Masu, the Kashkash, the Kairkamasha, the Leka, Katuatana, Katesh, Akarita,
7. Anaukasa, the whole Mashanata likewise, nor left he silver or gold in his land, he stript it of all its treasures (which) he brought with him.
8. The vile chief of Cheta with many allies accompanying him lay ambushed to northwest
9. (of Katesh). Now King Ramses was all alone, no other with him, the brigade of Ammon marching after him: the brigade
10. (of Ra?) at the dyke west of the town Shabutana; the brigade of Ptah in the centre,
11. the brigade of Set on the border of the land of Amairo. Then the vile Cheta chief made (an advance)

THIRD SALLIER PAPYRUS.—Page 1.

LINE

1. with men and horses numerous as sand; they were 3 men on a car, they had joined with every champion
2. of Chetaland, equipt with all war gear, they did not .... they lay in ambush hidden to north-west of the town
3. Katesh; then they charged the brigade of Ra Harmachis in the centre, as they were marching on, and feared not to fight.
4. Foot and horse of King Ramses gave way before them: they then took Katesh on the western bank of Hanruta;
5. this news was told to the king, then he rose as Mentu, he seized his arms for battle, he clutched his
6. corselet like Bar in his hour; the great horse that bore him, "Victory to Thebes" his name, from
7. the stable of Ramses Miamon, within the van. The king drew himself up, he pierced the line
8. of the foe, the vile Cheta; he was all alone, no other with him. When he advanced to survey
9. behind him, he found there encircled him 2,500 chariots stopping his way out. Every champion
10. of the vile Cheta and abundant lands with him, of Airatu of Maasu, of Patasu, of Kashkash,

Page 2.

1. of Iriuna, of Katuatana, of Chirabu, of Akarita, Katesh, Leka, they were 3 men on a car; they made
2. (a charge); there was no chief with me, no marshal, no captain of the archers, no officers; fled were my troops and horse.
3. I was left alone of them to fight the foe. Then said king Ramses, "What art thou, my father Ammon? what father denies his son?
4. for have I done aught without thee? have I not stept or staid looking to thee? not transgressing the decisions of thy mouth, nor passing
5. far astray from thy counsels? sovran lord of Egypt, who makest bow down the peoples that withstand thee, what are these Amu to thy heart? Ammon brings

LINE

6. low them who know not God. Have I not made thee monuments very many? filled thy temple with my spoils? built thee
7. houses for millions of years, given treasures to thy house, dedicated to thee all lands, enriched thy sacrifices? I have slain
8. to thee 30,000 bulls, with all wood of sweet scent, good incense coming from my hand. The making of thy court completed, I have built thee great towers
9. of stone above thy gate, groves everlasting: I brought thee obelisks from Elephantine; 'tis I who had eternal stones carried
10. guiding for thee galleys on the sea, conveying to thee labours of all lands. When was it said such happened in other time?

Page 3.

1. Shame on who opposes thy counsels, well to who approves thee Ammon; what thou hast done is from a heart of love; I call on thee my father Ammon;
2. I am amid multitudes unknown, nations gathered against me: I am alone, no other with me; my foot and horse have left me.
3. I called aloud to them, none of them heard; I cried to them. I find Ammon worth more than millions of soldiers, 100,000 cavalry,
4. 10,000 brothers, striplings, were they gathered all in one. No works of many men avail, Ammon against them: I attain that by the counsels of thy mouth O Ra,
5. not overstepping thy counsels. Lo, have I not done homage to the farthest ends of the land?" My cry rang unto Hermonthis: Ra heard when I called, he put
6. his hand to me: I was glad; he called to me behind; . . . . . "Ramses Miamon I am with thee, I thy father Ra: my hand
7. is with thee. I am worth to thee 100,000 joined in one; I am sovran lord of victory, loving valour: if I find courage, my heart overflows with joy;

LINE

8. all my doing is fulfilled." I am as Mentu, I shoot to the right, I seize on my left, like Bar in his fury against them
9. I find 2,500 chariots, I am amidst them, then were they overthrown before my steeds; not one of them found
10. his hand to fight, their heart shrank within them; their hands all dropt, they knew not how to shoot;

Page 4.

1. they found no heart to grasp spear; I made them fall into the water as fall crocodiles: they tumbled headlong
2. one over another; I slew them: my pleasure was that none of them should look behind him, nor any return; whoever falls of them
3. he must not raise himself up. Then the vile chief of Cheta stood amid his army to see the prowess of King Ramses. The king was all alone,
4. no soldiers with him, no horse; he turned in dread of the king. Then he made his mighty men go
5. in numbers, each one of them with cars, they brought all war-harness, the chief of Airatu, the chief of Masu,
6. the chief of Iriuna, the Leka, the chief of Tantani, the Kashkash, the chief of Kairkamash, the Chirabu,
7. the allies of Cheta all banded in one, 2,500 chariots. Charging the midst of them fiercer than flame I rushed
8. upon them; I was as Mentu; I let my hand taste them in a moment's space, I hew at them to slay them in their seats; each
9. one of them called to his fellow, saying, No mortal born is he whoso is among us, Set the mighty of strength,
10. Bar in bodily form: verily whoever comes close to him, his hand droops through all his frame, they know not how to grasp
11. bow nor spear when they have seen him. Coming to the junction of roads, the king pursued them as a griffin.

Page 5.

1. I was slaying them, none escaped me: I gave a call to my foot and horse, saying, Be firm, be firm in heart,

LINE

2. my foot, my horse; behold my victory. I was alone, Tum (Ammon) my support, his hand with me. Now when
3. *Menna* my squire saw me thus encircled by many chariots, he cowered, his heart quailed,
4. great terror entered his limbs, he said to the king. "My gracious lord, prince revered, valiant exceedingly, protector
5. of Egypt in day of battle, verily we stand alone amid the foe, how make a stand to save breath to our mouth?
6. how rescue us, King Ramses, my gracious lord?" The king said to his squire "Courage, courage,
7. my squire, I will pierce them as a hawk; I will slay and hew them, cast them to the dust. What
8. forsooth to thy heart are these Amu? Ammon brings very low them who know not God, who brightens not his face on millions of them." King Ramses
9. dashed into the van, then he pierced the foe, the caitiff Cheta, six times, one and all, he pierced them. I was
10. as Bar in his season, prevailing over them I slew them, none escaped. Then the king called to his archers
11. and cavalry, likewise to his chiefs who failed to fight. "Naught profits full heart[1] in you. Is there

Page 6.

1. one of them who did his duty in my land? Had I not stood as royal master ye were downstricken. I make princes of you always. I set
2. son in his father's estate; if any evil comes on Egypt ye quit your service. . . . . .
3. Whoever comes to make petitions I always pay regard to his claims. Never any royal master did for his soldiers what King Ramses
4. has done for you, I let you sit in your houses and your towns; ye have not performed my hests, my archers and cavalry.
5. I have given them a road to their cities; . . . . . .

[1] "Full heart," means, I suppose, "devotion to me."

LINE

6. Lo, ye have played cowards all together, not one of you stood to aid me while I had to fight. Blessed be Ammon Tum,
7. Lo I am over Egypt as my father Ra; there was not one of them to observe my commands
8. in the land of Egypt. O noble feat! for consecrating images in Thebes, Ammon's city: great shame on that act
9. of my foot and horse, greater than to tell, for lo, I achieve my victories:
10. there was no soldier with me, no horseman; every land beholds the path of my victories and might.

Page 7.

1. I was all alone, no other with me, no chiefs behind, no marshals, no captains of the army, no officers,
2. all people saw and will tell my name to limits of all lands unknown. If any warriors, relics of my hand, remain,
3. they will turn at seeing me: if 10,000 of them come upon me their feet will not stand firm, they will fly; whoever would
4. shoot straight at me, down dropt their arrows, even as they approached me." Now when
5. my foot and horse saw, I was addressed as Mentu, the strong sword of Ra, my father, who
6. was with me in time of need, he made all peoples as straw before my horses. They were marching one after another
7. to the camp at eventide; they found all the tribes through whom I pierced strewn in carnage, whelmed
8. amid their blood, with all brave fighters of Chetaland, with children and brothers of
9. their chief. Morning lighted the field of Katesh; no space was found to tread on for their multitude.
10. Then my soldiers came glorifying our names to see what was done, my cavalry likewise

Page 8.

LINE

1. extolling my prowess. "What a goodly deed of valour! firm in heart, thou hast saved thy army, thy cavalry, son of Tum,
2. framed by his arms, spoiling Chetaland by thy victorious sword, royal conqueror, none is like thee. King fighting for his host on day of battle,
3. thou great of heart, first in the fray, thou reckest not for all peoples banded together, thou great conqueror before thy army, in the face of the whole land.
4. No gainsaying. Thou guardest Egypt, chastisest lands of thy foes, bruisest back of Cheta for ever." Then the king
5. addressed his foot and horse, likewise his chiefs who failed to fight: "Not well done of one of you, your leaving me alone
6. amid the foe: there came no chiefs, officer or captain of host to aid me. I fought repelling millions of tribes
7. all alone. 'Victory in Thebes' and 'Nehrahruta' (my horses) they are all I found to succour me. I was all alone in the midst
8. of foes. I will let them eat corn before Ra daily, when I am in my royal palace: these are they found in the midst
9. of the foe, and my marshal Menna my squire, with the officers of my household who were near me, the witnesses
10. of conflict who saw them fall before the king; with victorious strength he felled 100,000 all at once by his sword of might."

Page 9.

1. At dawn he joined in fray of battle; he went terrible to fight, as a bull terrible with pointed horns he rose
2. against them as Mentu ordering the fray, alike valiant in entering battle, fighting fierce as a hawk,

LINE

3. overthrowing them as Sechet who sends flames of fire in the face of thy foes; as Ra in his rising at the front of dawn, shooting
4. flames upon the wicked: one man among them calls to his fellow, "Mark, take heed, verily Sechet the mighty is with him; she guides his horses: her hand
5. is with him." Whoever approaches sinks to ruin: she sends fire to burn their limbs, they were brought to kiss the dust.
6. King Ramses prevailed over them, he slew them, they escaped not, they were overthrown under his steeds,
7. they were strewn huddled in their gore. Then the vile Cheta prince sent to do homage
8. to the great name of King Ramses. "Thou art Ra Harmachis, thou art Set mighty of strength, son of Nut, Bar
9. himself: thy terror is over Chetaland brought low: thou hast broken back of Cheta for ever and ever."
10. Then came a herald bearing a scroll in his hand to the great name of Ramses, "To soothe the heart of the King,

Page 10.

1. Horus, conquering bull, dear to Ma, Prince guarding thy army, valiant with the sword, bulwark of his troops in
2. day of battle, king mighty of strength, great Sovran, Sun powerful in truth, approved of Ra, mighty in victories,
3. Ramses Miamon: The servant speaks to tell the king, my gracious lord, fair son of Ra Harmachis,
4. truly thou art born of Ammon, issue of his body, he gives thee all lands together, land of Egypt and land of Cheta, they offer
5. their service beneath thy feet to thee, Ra, prevailing over them. Yea, thy spirit is mighty,
6. thy strength weighs heavy on Chetaland; is it good to kill thy servants? thou exercisest thy might
7. upon them; art thou not softened? thou camest yesterday and slewest 100,000 of them; thou art come to day

LINE

8. . . . . victorious king, spirit glad in battle, grant us breath of life."
9. Then the king rose in life and strength, as Mentu in his season. Then he bad summon all the leaders of foot and horse,
10. his army all assembled in one place to let them hear the message sent by the great chief of Cheta

Page 11.

1. to King Ramses. They answered, saying to the King, "'Tis very good to let fall thy wrath, prince, sovran lord,
2. . . . . who can soothe thee in thy day of anger?" Then King Ramses gave assent to
3. their words: he gave his hand in peace, returning to the south, passing in peace to Egypt with his chiefs,
4. his foot and horse, in life and strength in sight of all lands. Dread of his might is in every heart, he protects his army,
5. all lands come to the great name, falling down and adoring his noble countenance. King Ramses reached fort Ramses Miamon
6. great image of Ra Harmachis reposing in the royal palace in Thebes, as the Sun's orb on his two-fold throne; Ammon (or the Gods)
7. hailed his form, saying, "Glory to thee, son loved of us, Ramses Miamon (to whom are destined)
8. festivities for ever on the throne of thy father Tum. All lands are overthrown under his feet: he has quelled (all enemies)."
9. Written in the year 7, month Payni, in reign of King Ramses Miamon
10. . . . . giver of life for ever like his father Ra . . . . . To the head guardian of the royal writings . . . . by the royal scribe Pentaur.

NOTES.

Raifet Fragment.

Line 5.— , *to* the Chetaland, apparently answering to , but the following words would more naturally seem to refer to the Cheta, "*the whole Cheta people came*"; and so De Rougé takes it; if is rightly read before , I do not see how it can have this construction.

Third Sallier Papyrus.

Page 1.

Line 2.— , If the text is right, and nothing omitted, no rendering seems possible but *they did not do or act*, but this seems strange just before they defeat part of the king's army. I suspect an error.

Line 7.— , Brugsch (Wörterbuch, 62) explains this word "*spring*," "*bound*"; it seems to me rather to answer in meaning to Homer's *ἐάλη, οἴμησεν δὲ ἀλείς*, *squaring* or gathering up the body before a spring. In the passage quoted from the campaign of Thotmes it may fitly describe the confused flight of troops packed together, *rolled up*, in their rout; *εἰλομένων, εἴλει δὲ, κ.τ.λ*, shows the same word used by Homer with this double application. In his Addenda, p. 1715, Brugsch gives as the original sense, "go on all fours."

Page 2.

Line 8.— , "*completed*" is the meaning given by Brugsch (Wörterbuch' 1545), which seems more in accordance with the context

than a negative sense of , would Ramses say a word detracting from the greatness of what he has done for Ammon? It might perhaps be rendered *did I not complete?* if it were clear that , could thus be put interrogatively as and .

Page 3.

Line 4.—"Brothers *and* children"; or is , in apposition with ?

Line 4.—At this line commences the parallelism with the Carnak text, (Brugsch, "Recueil," 29, 1,) with the words .

Line 6.—This passage perplexes me. Sallier seems to read (Brugsch, "Recueil," 29, 2), . Does this mean *being face to face with thee.* De Rougé gives it, "*I come quickly to thee*"; the determinatives after , in Sallier seem to point to a verb of motion; *cf.* Brugsch, Wörterbuch, 986, where the passage referred to is one that occurs in Mariette Abydos I, pl. 45*d*, and appears to mean "the heart of Horus leaps, moves to and fro."

Lines 7, 8.—Where does Ammon's speech end? We might suppose the words , &c., to begin the king's narrative of himself, "I take courage, my heart rejoices." The clause seems to me better suited to the mouth of Ammon, as the concluding words of his speech, affirming his omnipotence, "whatever I do attains completion." It seems difficult to accept De Rougé's view, that the god and the king are identified as speakers; or that of M. Mariette, who continues Ammon's address to p. 4, line 3. "whoever falls shall not rise," making all that comes between a prophetical assurance, if I understand him rightly. ("Aperçu," p. 42, Paris, 1867.)

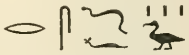
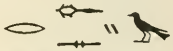
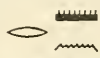
Page 4.

Line 10.—At this point the Carnak text (Brugsch, "Recueil," 30, 10) inserts a line not found in Sallier, to the effect, "hurrying before him seek we our life, taste we breath, whoever comes——" De Rougé inserts it in his translation.

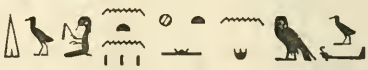
Page 5.

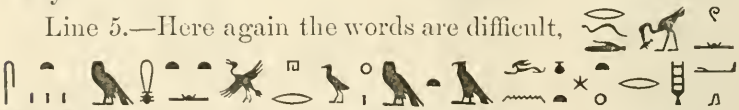
Line 2.—Here a singular discrepancy of arrangement is found between the Papyrus and the Carnak text, which at this point (Brugsch, "Recueil," 30, 13) introduces the reproachful speech of Ramses to his officers, beginning . . . "the land? Had I not stood," &c., Sallier p. 6, 1. The two texts then keep alongside till Sallier, p. 7, 4 = Brugsch, "Recueil," 30, 22, where the Carnak text inserts the episode of the Squire's dread and his Master's daring, to col. 26 = Sallier, p. 7, 10, from which points the two threads are again united. De Rougé remarks that the Sallier order is best. Something contained in Papyrus, p. 9, 7; p. 10, 3, seems omitted or shortened in Carnak text, "Recueil," 32, 38-40.

Line 8.—"*Ammon brings low down them who know not God,*" corresponds to page 2, line 6: , here , De Rougé says the other texts have a different reading. Unfortunately no other text is known to me for comparison as to these words: the words immediately preceding in Brugsch, "Recueil," 31, 23, exhibit the variety for , Brugsch in his grammar cites , (p. 21) as the reading in *Luxor*, col. 23. Does he mean Carnak, or is this one of the hitherto unpublished discoveries? This is one of many cases in which the translator feels himself necessarily at a great disadvantage, from having no means

of knowing what the restored fragments contain. If the reading and my interpretation is correct, we have used with causative force; as according to Brugsch it certainly is in some verbs (see Wörterbuch, 838-9) corresponding to in several well-known expressions. But I have not found this usage often noticed by other scholars, and must speak with hesitation about it. Dr. Stern finds an instance in three almost identical inscriptions, Leps. Denk. 3, 175*a*, 200*d*, 218*d* (Zeitsch. Aegypt., 1873, 135), but is it too bold a conjecture that the true reading here may be  a frequently recurring mode of expression?  might be compared with  , , &c., but the arrangement seems to me peculiar, where or would be more usual. Perhaps the subject may receive illustration from some more learned scholar.

Page 6.

Line 2.—The text here is very obscure. I can only make of it (?) (?) Brugsch, "Recueil," 30, 14, has  , "I give you possessions to keep in your hands"? but generally , means *take from.* I doubt if my reading of Sallier can be right. Can a negative come in anywhere, "I have given you possessions *not* to be taken away."

Line 5.—Here again the words are difficult,  , "so as to find them ready alike, day and hour, to stand up to battle." This seems De Rougé's version.

Line 8.— . On see Brugsch, 1060–1148, and De Rougé's Abr. Gram, 89. The word, whether more connected with the idea of height , or of measure , possibly with both alike, seems to be used with the relative force, *such, as;* and like *talis, qualis,* &c., might naturally acquire an interjectional force; and this seems appropriate both here and in 8, 1. *how great,* here ironically.

Page 7.

Line 6.—From this point it becomes possible, as far as its fragmentary condition allows, to compare the Luxor text given, Brugsch, "Recueil," pl. 40-42. The first exact correspondence occurs at pl. 41, col. 27 = Sallier, p. 7, 6, "whelmed before my horses," and seems to be continued to the end.

The extracts from the 3rd Luxor text (Brugsch, "Recueil," pl. 53) are too scanty to afford much help in the comparison of different records; what we can read there corresponds rather to the Abusimbel text than to the Papyrus; so line 5, "he fled before the king when he heard," line 9, "King Ramses was sitting to speak with his chieftains,"—as well as other phrases, occur in the inscription, but are not found in the Papyrus as we have it, nor in De Rougé's restoration ("Travaux," p. 3) from the recovered monumental texts. Two striking instances of discrepancy may be worth noticing between the Abusimbel and Ramesseion texts (which I call ψ and θ). In each the former has an omission which destroys the sense.

ψ. 13. .....

θ. 7. .... 8.

ψ. 36. .

θ. 20.

21. (here, a few letters seem wrongly copied in Leps. Denk.)

It would look as if the carver of the inscription had before him an original to copy, in which two consecutive lines ended in the first passage with in the second with , and in each case, coming back from the stone to his MS., as we may fairly call it, his eye slipt and missed a whole line by mistake.

Page 8.

Line 7.—Apparently the second name should be read (?) "Vulture pleased," explained by De Rougé, "Noura is pleased."

Line 8.— , &c. I can see no meaning for but with *now at rest*, "laid low, overthrown": but from what follows I should have expected it to be an epithet to "my act of giving." Is it certain that can by itself mean simply "*I will give*"? M. Maspero, "Formes de la Conjugaison," &c., p. 23, quotes two instances for this usage; the First Sall. 3, 8, 5, 6, seems inexplicable otherwise; the second is from a Carnak text of this inscription unknown to me.

Page 9.

Line 1.— (so it seems to read) answers to Brugsch, "Recueil," 32, 35, . Which reading is to be preferred? Neither poets nor farmers in our island, as far as is known to me, describe the bull as a ferocious enemy to ducks or geese. But Pentaur's experience may have been different; and it is possible to conceive that, in a season of drought, thirsty bulls may have rushed to the water so impetuously as to scatter the affrighted birds on its surface in a confusion that would justify the simile. Goats appear to have been liable to a similar panic (*cf.* Champ. Mon. 3, 217; Düm. Hist. Ins. II, 47, 24). Travellers in Eastern parts may be able to throw light upon these expressions. At the same time, of the Carnak text, a phrase applied to a bull with horns sharpened or set for battle (*e.g.* Düm. Hist. Ins. I, 18, 13 and 26; *cf.* Brugsch, Wörterbuch, 1206), is so appropriate that one might be tempted to guess a careless confusion somewhere between and . The hawk would more naturally be introduced in the company of tame villatic fowl, as it appears in the two passages cited above, where the fierce onset of the king's men and horses is likened to the charge of bulls on goats and hawks on feeble birds. Perhaps after all my reading of the hieratic text may be wrong. Dr. Birch, to whose constant kindness I am greatly indebted for the pains he has taken in revising this paper, suggests that the word intended may be either equivalent to , (Brugsch, Wörterbuch, 374) or (Wörterbuch, 1330) "on the plain." Every suggestion from so high an authority has the greatest weight; still, from the tone of the description, it seems to me a more forcible phrase than "on the plain" might be expected; either an epithet adding to the picture, such as , or the mention of the animals against whom

the bull's fury is directed, as in both passages referred to is found after . The difficulty is much increased by the obscurity of the words following in the next line.

The word is well known in the sense of *dread*, *terror*, and Brugsch (Wörterbuch, 984) renders a phrase similar to what occurs Sall., 3, p. 1, 8, *inspiring dread.* M. Chabas has, I think, sufficiently shown that it must sometimes contain the meaning of *prepare for*, or *make an attack*, *lie in wait ready for action;* and this seems to suit the context better both here and above.

Line 2.—Papyrus has *thou art* as Mentu, according to the most natural rendering; and again, line 3, *thy foes.* Is there a confusion of persons here by the negligent copyist, or must we admit to be equivalent to , as is sometimes the case? This line, near the beginning, certainly seems to have ; but it seems impossible to take it as "*thou art.*" Both Carnak and Luxor here give first person. Brugsch, "Recueil," 32, 35; 42, 41.

Lines 2, 3.—Query words after (?) all that I can certainly make out is . De Rougé says there is a large gap here.

Lines 8, 9.—I am not sure what follows *Bar*, but I suppose nearly as in 4, 10, .

Page 10.

Lines 7, 8.—The gap here De Rougé proposes to supply translating it "*there will be none left to become thy subjects*": on the last word and some similar forms, compare Chabas "Mélanges," Ser. 3, l. 14.

Line 8.— Here the words seem legible, but is their meaning plain? De Rougé, "do not execute thy designs." occurs above, 2, 4 (without determinative of *motion*, or

of *speech* or *thought*). Again 6, 3; but the force is in neither passage over-clear to me.

Line 9.—This passage is somewhat obscurely written in the Papyrus. The corresponding portion of the Luxor text given by Brugsch, "Recueil," 42, 52, reads . Assuming this to be correct, the most natural translation of (on which word Mr. Le Page Renouf has written a very interesting essay in Zeitsch. Aegypt., 1872, p. 91, et seq.) would seem to be "returned," and so De Rougé understands it. But Dr. Birch suggests that the true reading may be instead of , and this phrase which occurs twice above (pp. 1, 5 and 9, 1) appears every way suitable, and would remove much difficulty. It seems too early in the narrative for the *return* of Ramses to be mentioned here; and Mr. Renouf's explanation "replied" lies open to the objection that except the words "I am as Mentu," no reply follows; a brachylogy scarcely to be imputed to Ramses. De Rougé indeed thinks that at this point several words are wanting to the Papyrus. What they are must be learnt, if ever, from further discoveries at Luxor.

Page 11.

Line 2.— , latter words cited and translated by Brugsch, (Wörterbuch, 1558). The meaning of the former is obscure to me. De Rougé says the passage is much disfigured in the Papyrus.

Line 4.—The words look like "*in front of all his lands, peoples*," but I am not sure; there seems hardly room for but there is certainly an .

OBSERVATIONS ON THE ASSYRIAN VERB *BASU* AS COMPARED WITH THE HEBREW VERB הָיָה, *HÂYÂ*, "*HE WAS*."[1]

By Professor William Wright, LL.D.

Read 3rd March, 1874.

Without professing any special knowledge of Assyrian and Babylonian, I must confess that it appears to me that one of the first conditions of a successful study of these languages is a thorough mastery of the other Semitic tongues. The labours of Rawlinson, Hincks, Norris, Oppert, Smith, and other scholars, have laid the basis of a correct understanding of the Assyrian cuneiform. We are certain that the language with which we have to deal is Semitic; we are acquainted with the outlines of its grammar; we know the meaning of a considerable proportion of its ordinary vocabulary. But the details of the grammar have yet, it seems to me, to be thoroughly worked out; and the meaning and derivation of many a word in the published texts are still doubtful or wholly unknown.

It is with regret, therefore, that I observe that some of our recent students of Assyrian seem to be but imperfectly acquainted with the cognate languages; and hence the results of their work are open to criticism on the part of those who are more familiar with Hebrew, Aramaic, and Arabic.

By way of illustration I shall briefly examine part of an elaborate article published in a recent number of the Transactions of this Society (vol. i, part 2, p. 281), in which the author treats of the Assyrian word *basu*, and identifies it

[1] See Transactions of the Society of Biblical Archæology, vol. i, part 2, pp. 281–288.

etymologically with the Hebrew הָיָה, *hâyâ*, or, in an older form, הָוָה, *hâvâ*. This identification is effected in the following manner.

(1.) The initial ה, *h*, is dispensed with, on the ground that it is lost in Syriac, where the word is said to be written ܗܘܳܐ, and to be pronounced *vo* or *wo* (p. 285).

(2.) The medial ו, *v* or *w*, of the form הָוָה is assumed to be interchangeable with ב, *b*, because, according to Fürst (notoriously the least competent and least trustworthy of recent Hebrew lexicographers, and from whose errors those of the author are evidently in part derived), the fundamental signification lies in an alleged Talmudic verb הֲבָא, "to breathe" (pp. 285, 287).[1]

(3.) The final ה *h* of הָוָה or הָיָה is said (p. 287) to be "retained, as if it were inscribed with mappik, although it is not so inscribed." Consequently, it "is not a substitute for another letter," viz., ו or י, "but is an original element of the stem"; and is therefore (p. 288) capable of being represented by the *s* of *basu*.

To these assertions I must express my dissent. The first statement, that the initial *h* of the verb ܗܘܳܐ is lost in Syriac, is inaccurate. It is only in modern Syriac that the initial *h* altogether disappears. In ancient Syriac this elision takes place only in certain cases, where the verb, as an auxiliary, has almost become one with the word to which it is annexed. The Syrian spoke ܒܪܝܫܝܬ ܐܝܬܘܗܝ ܗܘܳܐ ܡܠܟܐ, *îthau wô* (for *îthauhî hăwô*); ܩܳܐܡ ܗܘܳܐ ܝܘܳܚܢܳܢ, *ḳôyêm wô* (for *ḳô'êm hăwô*); and ܫܰܪܺܝ ܗܘܳܐ ܡܰܟܪܶܐ, *sharî wô* (for *sharrî hăwô*); but he also spoke ܡܶܕܶܡ ܕܰܣܢܶܐ ܠܳܐ ܗܘܳܝܗܝ, *lô hăwôï* (for *hăwôïhî*);

[1] Not being deeply read in the Talmûd, I cannot say for certain whether this verb is one of Fürst's inventions, or not. It appears, amid much attendant nonsense, in his Chaldäische Grammatik, § 171; in his Concordance, p. 294; and in his Hebrew and Chaldee Lexicon, art. הָוָה; but without any references to prove its use. I find no such verb in Buxtorf's Lex. Chald. Talmud. et Rabb., 1639; nor in the reprint by Fischer, 1866–72; nor in Levy's Chaldäisches Wörterbuch, 1867; nor in a fine manuscript of the *'Arûch* in the University Library of Cambridge.

ܗܘܳܐ ܕܶܝܢ ܥܕܳܐ ܕܚܘܳܕܳܐ, *hăwô dên;* ܣܦܝܢܬܳܐ ܗܳܝ ܗܘܳܬ ܠܘܳܬ ܐܪܥܳܐ, *hăwôth lĕwôth ar'ô;* ܐܢܳܐ ܥܡ ܝܫܘܥ ܗܘܳܝܬ ܢܶܨܪܳܝܳܐ, *'ám Yêshû' hăwait;* and not *wô dên, lô wôï, wôth, wait.* The first radical has not, therefore, even in Syriac, "been mute for perhaps two thousand years" (p. 286); and as we know of no such elision in Hebrew or in Biblical Aramaic, we shall not be justified in assuming, with the writer of the article in question, that the first syllable of the Hebrew root הוה "may be non-existent in Assyrian" (p. 286).

The second statement that the medial ו, *v* or *w*, of הָוָה is interchangeable with ב *b*, is equally unestablished by the examples adduced. הָוָה and הָיָה, "he was," are, in my opinion, not identical with חָיָה, "he lived," as maintained on pp. 284, 285. The so-called "cognate words" (הֲבָא, etc.), enumerated on p. 285, have in reality nothing to do with one another, unless it be on the dubious principle that any given consonant may be exchanged for any other. הָוָה, with its cognates, has been well handled by Gesenius, in the *Thesaurus* and in the *Handwörterbuch* (5th edit., by Dietrich, p. 227). The substantive verb has, in most cases, developed its abstract signification out of a concrete one. The Arabic كَانَ, *kâna*, Ethiopic ኮነ : *kôna*, Phœnician כן, *kôn*, is properly "erectus stetit" (Hebrew rad. כון), then "exstitit, evenit, factus est, fuit" (compare Spanish *estar*= Latin *stare*, whilst *ser*, more anciently *seer*, is *sedere*). The Ethiopic ሀለወ : *hallawa*, is not improbably to be compared with the Arabic حَالَ *ḥâla*, for *ḥawala*, "to turn, shift, be changed" (compare *verto* and *versor*, Syriac ܗܦܟ and ܐܬܗܦܟ). And similarly the Hebrew and Aramaic הָוָה, הָיָה, הֲוָא, ܗܘܳܐ, is originally "eccidit" (Arabic هَوَى, *hawâ*, "decidit"), then "accidit, evenit" (compare Arabic وَقَعَ, *waḳa'a*, "to fall, happen"), "factus est, fuit."

As to חָיָה, Arabic حَيِيَ *ḥayiya*, or حَيَّ *ḥaiya* (Hebrew חַי), Ethiopic ሐይወ : *ḥaywa*, Aramaic חֲיָא, ܚܝܳܐ *ḥăyô*, its

fundamental signification is that of "drawing oneself together, drawing oneself up, shrinking, contracting," as opposed to that of "stretching" or "extending oneself," which implies death (Arabic مَدَّ, "extendit," مَاتَ, Ethiopic ሞተ: *môta*, Hebrew מֵת, Syriac ܡܝܬ, "mortuus est"). See Gesenius's *Handwörterbuch*, 5th edit., pp. 272, 273; F. Böttcher, Proben alttestamentlichen Schrifterklärung, p. 83, foll.; Fleischer in the Berichte d. Königl. Sächs. Gesellschaft d. Wissenschaften, philologisch-hist. Classe, for 1863, p. 175. The medial *v* or *w* has been preserved in the Hebrew substantive חַוָּה, and in the Arabic transitive verb حَوَى, *ḥawâ*, "to draw together, collect, contain."

The verb הָיָה, "he was," is, as rightly observed by the author, a ל״ה verb, "but," he adds (p. 287), "it is not conjugated like ordinary ל״ה verbs, for the ה is retained, as if it were inscribed with mappik, although it is not so inscribed." This statement is, I much regret to say, incorrect, if not indeed the reverse of fact. In היה the final ה is treated as in every other ל״ה verb, and therefore cannot be "an original element of the stem." It is a pity that this misleading term "ל״ה verbs" (to which the author's error is no doubt partly traceable) remains in use. ל״ה verbs are, strictly speaking, such as have mappîḳ in the final letter, like גָּבַהּ, נָגַהּ,; whereas those commonly called ל״ה are in reality either ל״ו or ל״י. The Ethiopic has preserved the final consonant intact, as in ሐለየ: *ḥalaya*, "to play on an instrument, to sing," ሰተየ: *satya*, "to drink," ወረወ: *warawa*, "to throw," ሕይወ: *ḥaywa*, "to live"; whereas the Arabic, Hebrew, and Aramaic have contracted the trisyllabic form into a dissyllable. If the third radical is *w*, the Arabic grammarians write the word with *alif*, as بَدَا *badâ* (for *badawa*), غَزَا *ghazâ* (for *ghazawa*); but if the third radical is *y*, they write it with *yâ*, though the pronunciation is the same as in the former case, *e.g.* جَرَى *jarâ* (for *jaraya*), رَمَى *ramâ* (for *ramaya*). The Hebrews, however, write in all

cases ה, merely as a vowel-letter to indicate the sound *â*, as גָּלָה *gâlâ*, for *galaya*, *galawa* (Arabic جَلَا *jalâ*), שָׁבָה *shâbhâ*, for *shabaya* (Arabic سَبَي *sabâ*).[1] The Aramæan uses א for the same purpose, as ܫܒܐ *shĕbhô* for *shabaya*, ܚܝܐ *ḥăyô* for *ḥayiwa* (Arabic حَيِي *ḥayiya*, Ethiopic ሕይዎ: *ḥaywa*).

In this way the three propositions, on which rests the identification of the Assyrian *basu* with the Hebrew *hâyâ*, have been, I think, proved erroneous. I may be allowed to add that, even if the final *h* of הָיָה had really been an integral part of the root, it would not have availed anything. Grammarians are agreed that *su* and *si* are the Assyrian equivalents of הוּא, סוּ, הִי, and הִיא, סִי, and that *saf'al* is the usual representative of the Hebrew *hif'îl*.[2] But be it observed that the *s* is in these cases *initial*. It by no means follows that an Assyrian *medial* or *final* *s* could become[3] *h* in Hebrew in the middle or at the end of a word. The fact that the Sanskrit *sarva*, "all," is identical with the Bactrian *haurva*, does not justify us in assuming that a Sanskrit *s* may be represented in every position by a Bactrian *h*.

[1] The same use of final ה as a mere vowel-letter, to indicate the sound *â*, appears in the so-called ה *locale*, that is to say the old accusative singular, ending in *a*; *e.g.* יָמָּה, "seaward, westward," בֵּיתָה יוֹסֵף, "into the house of Joseph."

[2] This phenomenon is not confined to Assyrian. One dialect of the ancient Ḥimyaritic exhibits the pronominal suffix of the third person masculine in the form שֹׁ or שִׁ, plural שֹׁם, whilst the other has הוּ, plural הֻמוּ; and in the former we see the *saf'al* conjugation, whilst the latter has the *haf'al*. The pronominal form with initial *s* has partially survived even to the present day in Mahrî, in which we find, according to Von Maltzan (in the Zeitschrift d. D.M.G., Bd. xxv, p. 200), the third person masculine singular *he*, plural *hêm*, (*habû*); feminine singular *sê*, plural *sén*; the corresponding suffixed forms being, for the masculine, *he*, *hum*, and for the feminine, *es*, *senn*.

[3] I say "become," because I think that in the cases cited the *s*-form is really the older. Assyrian *su*, Ḥimyaritic שֹׁו, שִׁ, precede Hebrew הוּא, Aramaic ܗܘ *hû*, in certain cases ܣܘ *û*; and just so the original *saḳtala* appears as Assyrian *saḳtal*, Ḥimyaritic *saḳtal* and *haḳtal*, Hebrew *hiḳṭîl* (for *haḳtal*) Ethiopic and Arabic *aktala*, Aramaic *aḳṭêl* (as well as *shaḳṭêl*).

Having taken so much pains to overturn the hypothesis of a fellow philologist, it is but fair that I should try to set up another in its place; and I may therefore be allowed, in conclusion, to point out what, I think, is the probable origin of the word *basu*. Though used as a verb, and exhibiting, according to Assyrian scholars, the inflections *ibsu* or *ibsi*, *ibassi*, *usabsi*, the word has a most unusual form; nor does any other Semitic language possess a verb *basâ* with any approximate shade of meaning. I believe therefore that Schrader has hit upon the correct explanatiou, when he says (Zeitschrift d. D.M.G., Bd. xxvi, p. 304, note) that *basu* was not *originally* a verb, but a preposition with a pronominal suffix, *ba-su*, corresponding exactly to the Ethiopic በ: *bô*. This በ: *bô* (for *ba-hu*) signifies both "he is," "there is," and "he has," and may be construed with an accusative (see Dillmann's Grammatik d. Äthiopischen Sprache, § 167, 1, *b*, § 176, *h*, § 192, 1, *b*, and his Lexicon, col. 481). Its negative is አልበ: *al-bô*, in which አል = Hebrew אַל, "not" (see Dillmann's Lexicon, col. 717).

ACCOUNT OF AN EGYPTIAN ALTAR IN THE MUSEUM AT TURIN.

Drawn by Joseph Bonomi, and described by Samuel Sharpe.

Read 5th May, 1874.

This monument, which is perhaps an altar, is wrought of grey granite, and is, if the base on which it stands is part of it, three feet three inches high. Both pieces are of the same material. It has an hieroglyphic inscription, arranged in five columns, which are marked in the Plates as A, B, C, D, and E. Each column, except A, had originally twenty-one lines of hieroglyphics.

The inscription, although it bears an early name, that of King Pepi, is yet probably of a late date, perhaps of the age of the Ptolemies, or even later.

The column A begins with the representation of the sacred barge, Baris, like that carried in the procession which is sculptured in the great court of Medinet Haboo. The next compartment of this column is surmounted by a broad line, the two ends of which terminate in points inclined downwards, signifying the heavens, the usual significant margin of the upper part of a picture or relievo. The sculpture contained in this second compartment of A is of a different character to the rest of the monument, the hieroglyphics are much larger and deeper, as signified by the thicker lines, and it contains the name of Mira, who is styled the "Priest, approved by Pasht, and beloved by Pthah, the god of Memphis." This name has been cut over some former work, as the level of the cartouche is considerably below the general surface of the compartment, and hence there appears good reason to doubt the antiquity of this part of the inscription. The next compartment contains a figure of Thoth, the Lord of

Oshmounayn, in simple outline. The style of the drawing of this figure resembles that of the figures on the monuments of the Ptolemies. The fourth and last compartment contains the figure of the son of a king, in the dress of a priest, and in the attitude of declaiming. He is "approved by Smotef," one of the four gods of the dead. This figure is considerably deeper, as is signified by the thicker line, and is in the true Egyptian style of relievo, but unfortunately much injured by the decay of the surface which affects the whole of the lower part of this monument, probably from the contact of the nitrous earth which encumbers the lower part of all the monuments *in situ*.

Mira may be the Mœris of Herodotus,[1] probably a tributary sovereign or chief priest of Memphis, when that city was under the rule of Thebes. Herodotus places him nine hundred years before his own time, or about B.C. 1300.[2] But as this name is not part of the original inscription, it gives us no clue to the date of the monument, which was made at a considerably later epoch, and in the decline of Egyptian art.

The following portions of the inscription are all that I can certainly identify:—

COLUMN A, is either the first or the last of the columns of writing.

COLUMN B, lines 1 to 12, contains the names of the chief gods:—

1. Apis, spelt by means of the animals head APE, and Chem, spelt T H M.
2. Horus, and Aroeris, a second Horus.
3. Mo, *Truth*, and Daphne, a Greek name for Pasht, being shortened from Tape-hanes.[3]
4. Seb, the Crocodile, and Neith, the Queen of Heaven.
5. Osiris, or perhaps Horus, Isis, and Nephthis.
6. Horus "of the Temple."
7. Ra, with the word "year," "blessed for ever."
8. Life, Permanence, and Happiness (?), personified as three deities.

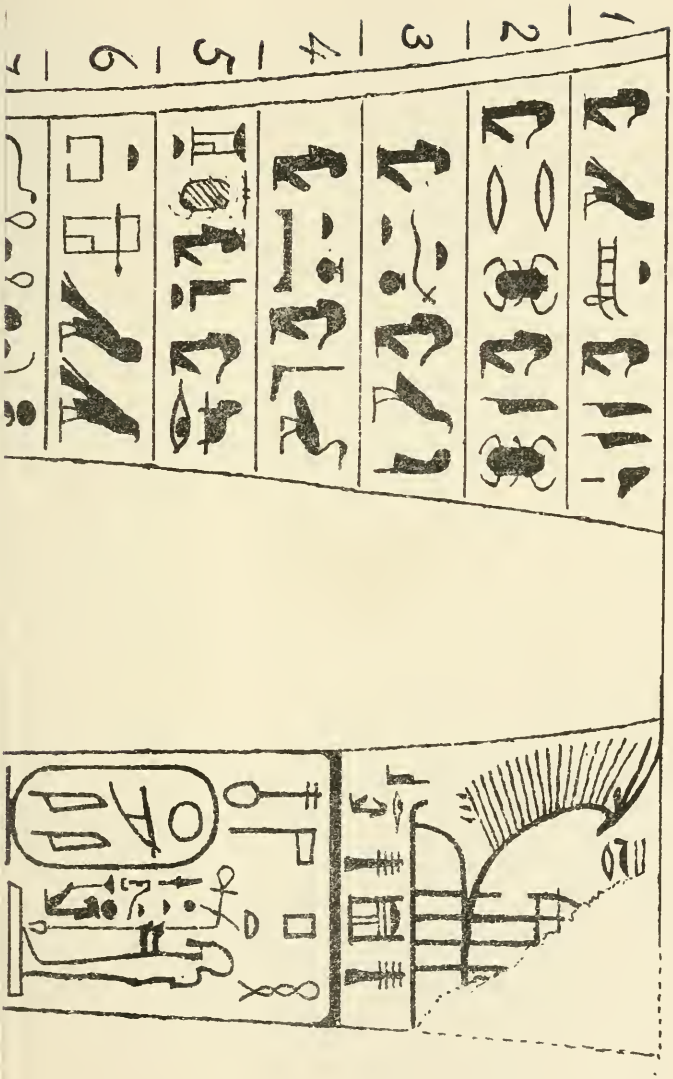
[1] Euterpe. [2] Sharpe, Chronology of Egypt.
[3] A city in the Delta; see Jerem. xliii. 9.

9. Thoth.
10 and 11. A second form of Thoth (?).
12. Osiris.

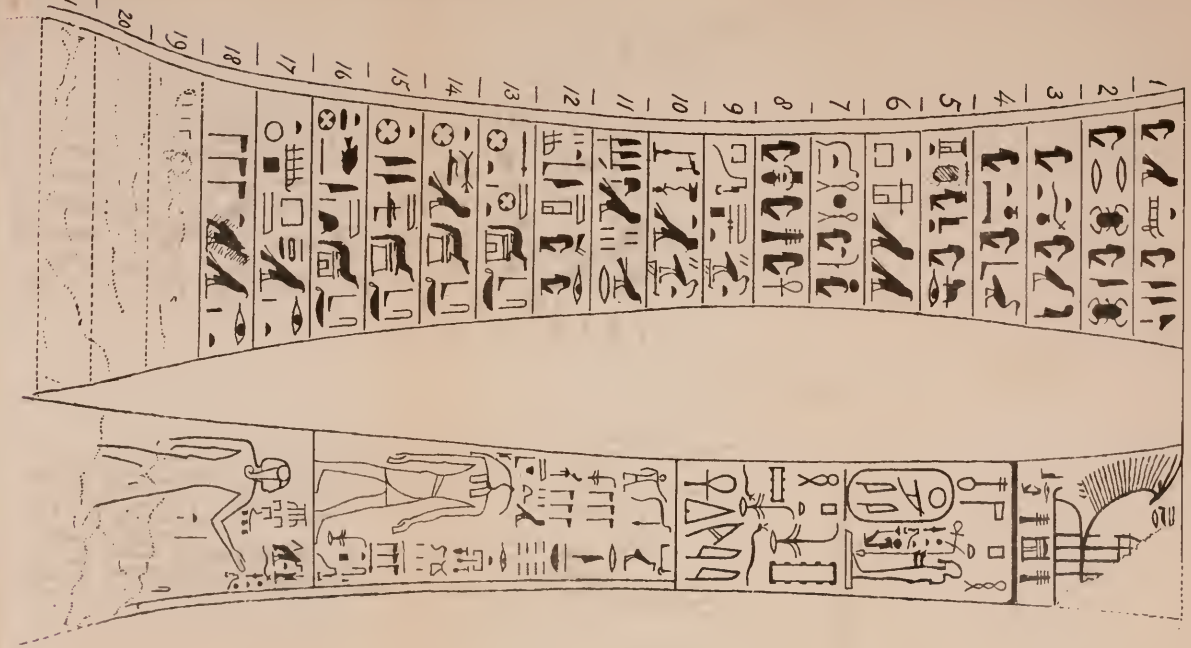
The rest of this column, with columns C, D, and E, 4, 5, and 6, contain the names of the gods peculiar to the several cities of Egypt.

In conclusion, some attention should be directed to the peculiar shape of the monument, which, although evidently an altar, is of a more elegantly curved form than is usually found in early Egyptian art.

TURIN.



INSCRIPTION UPON AN EGYPTIAN ALTAR AT TURIN.



D
C
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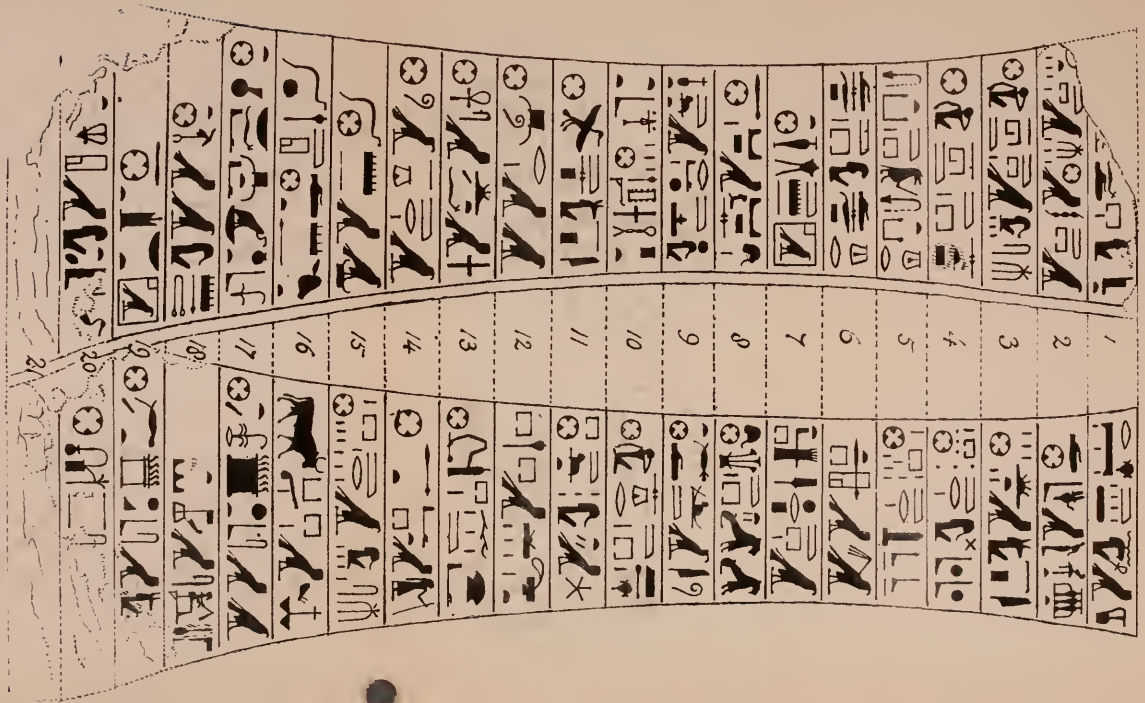
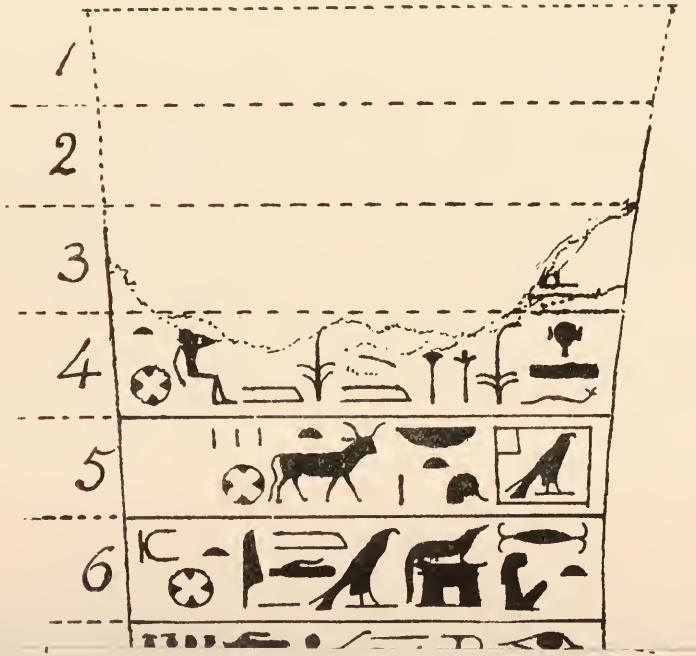
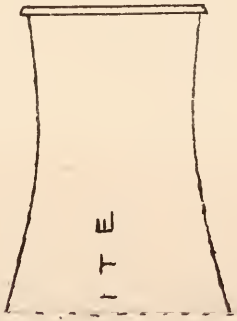
INSCRIPTION UPON AN EGYPTIAN ALTAR AT TURIN.



E



THE
EGYPTIAN ALTAR
AT
TURIN.
DRAWN BY JOSEPH BONOMI,
1873.



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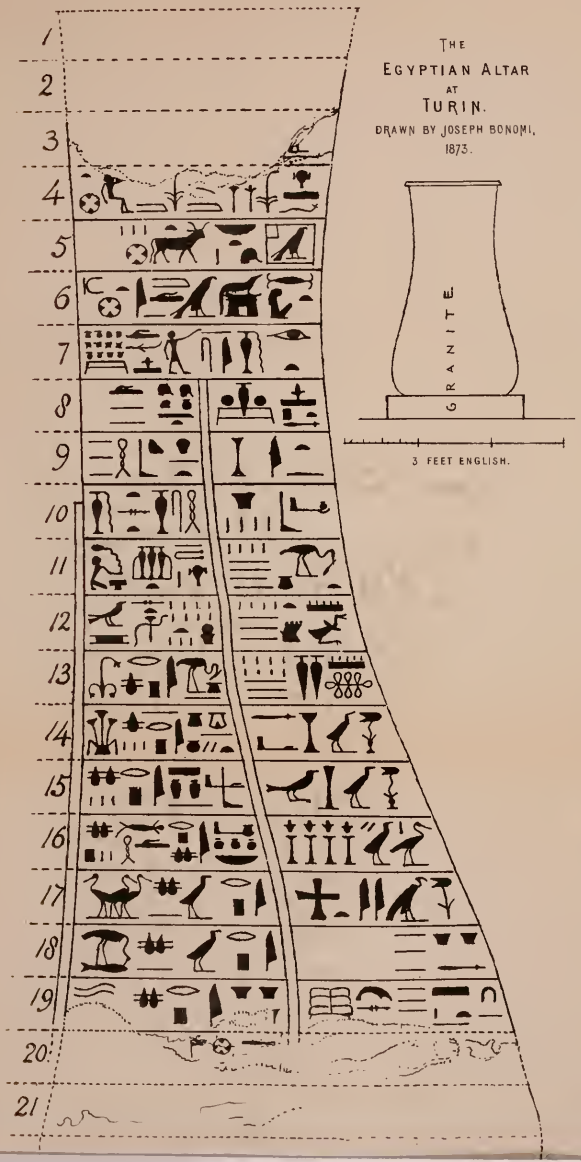


THE EGYPTIAN ALTAR AT TURIN.

DRAWN BY JOSEPH BONOMI, 1873.

INSCRIPTION UPON AN EGYPTIAN ALTAR AT TURIN.

TRANSLATION OF THE HIEROGLYPHIC INSCRIPTION ON THE GRANITE ALTAR AT TURIN.

By S. Birch, LL.D.

Read 5th May, 1874.

The granite monument at Turin is really the base of an Altar, and the inscription contains the names of the different gods for whom it was made and dedicated. At the last side, Pl. E, line 7, is "the making of libations and addressing the table of offerings" (*Tebhu*), followed by two columns descriptive of the altars and of the objects offered. The first side contains the title and names of Pepi of the VIth Dynasty, in whose reign the monument was made; and as great prominence is given to the worship of the god Ptah, it was probably one of the altars of the Hephæstæum or temple of that God at Memphis. It is therefore interesting, as showing the names of the principal deities then worshipped. The text is as follows:—

Plate I, Col. A.

The ark of the god Sekar or Socharis, called the *hannu* on its slip, *mafekh;* of the inscription above, *hannu en sekar* 'The ark of Sekar,' the latter two words only remain.

Beneath is 'Osiris Tat' or Osiris The Tat or 'established' and his box or coffin. In the next compartment are the name and titles of Pepi—

"The good god Pepi the giver of life, beloved of Ptah "who is (the chief) of Southern wall, approved of Sekhet."

Sekhet was the wife of Ptah and mother of Nefer-Atum. These three gods formed the Memphian Triad.

In the third compartment is the god Thoth, ibis-headed, standing, and his speech, 'The speech. Oh gods of the South, oh gods of the West bring offerings, give them, I say

the lord of Sesen, give sepulchral food of bread, beer, oxen, geese to the great gods approved of the South.'

Sesen is Eshmoun or Hermopolis, the Nome over which Thoth presided and of which he was afterwards Eponymous. The mention in this portion of the gods of the South and West shows that the lists refer to them.

In the fourth compartment is the god Petmutf, "who dwells in the houses or places of the Manu" or Ocean. He appears under his usual form of a youth, and is styled 'approved of Sekhet.' The rest of the inscription is wanting.

Plate I, Col. B. List of Gods.

LINE

1. Satemi ('Hearing'), Tum [Tomos].
2. Khepera, Kheprer [The Scarabæus].
3. Shu, (Sôs) Tefnu.
4. Seb, Nut.
5. Osiris, Isis, Set,[1] Nephthys.
6. Har in the great palace.
7. Ra or 'The Sun,' Renpa 'the year,' Het 'an age,' Geta 'Eternity.'
8. Ankh 'Life,' Tat 'stability,' Aut 'Triumph.'
9. Thoth in the satp house [place of selection].
10. Thoth at the balance.
11. The great one of the five in Api-sekhet.
12. Maa 'Sight,' Satem 'Hearing,' in Absi.
    Abotis in the Hypselite nome.
13. Sebak in the town of Aa (Letopolis).
14. Sebak in the city of Shet.
15. Sebak in Tebi (Apollinopolis Magna or Edfu).
16. Sebak in the city of Apant.
17. The eye of Harmachis coming out of light.
18. The Eye of Horus, mother of the gods.
19. 20. Quite obliterated.

Plate II, Col. C.

1. Khnum [Chnoumis] in the 4 pools above.
2. The dweller in the West, Osiris in Abydos.

[1] The name Set has been anciently erased: it is the oldest mention of this god.

LINE

3. Khebkheb [door openers] in the Temples.
4. The obelisk in the Temples.
5. Har [Horus] in the great palace.
6. Har in the House, chief of the palace.
7. The two lion gods in Paha.
8. The Boat in the city of Shet.
9. Justification in Pa sekar.
10. The adorers in the city of Kat.
11. The riches in the Treasury.
12. The weapons in the city of Pa-kar (arsenal, or battle city).
14. The chiefs in the city of Aat Aat [" great house," place near Memphis].
15. The four born of Horus [The four genii of Karneter or Hades] in the Temples.
16. Uta [Listener] in Pa-ka, (The place of the Bull, or Apis, or else Athribis).
17. Har [Horus] in the town of Sebekh-res [Door of the South].
18. The great god in Karneter [Hades or Gournah].
19. [Anup, Anubis] in the town of Sebekh-meh [Door of the North].
20. [some god] in the town of Senen [city of Registers].

PLATE II, COL. D.

1. Isis in Pa-ft.
2. Har [Horus] in the town of Pa-snatem, those born of Har [Horus] in Pa . . .
3. Those born of Har [Horus] in the city of Panaham.
4. Set in the city of Panaham.
5. Kartek [Spark holder, a form of the goddess Ta-ur or Thousris] in Patek the place of Sparks.
6. Kar-tes [Flint bearer] in Pa-tes [place of Flint, of Flint weapon].
7. Athor in the town of Mensa [city of pots or vases].
8. Api tu s [she who is on the Hill] the city in Tuaa [of the Oxyrhynchite nome].
9. Ra at his setting, Ra Harmachis on the good throne.
10. Ptah in the Sebti-hut (city of white walls; akropolis of Memphis) on the East.

LINE

11. Anup [Anubis] in the town of Sep [oxyrhynchus].
12. Har in the town of Rumakhu[1] [one of the Nubian cities under Egypt].
13. The one attached to his place, in the city of Sankh.
14. Har [Horus] in the city of Ru-en-kau.
15. Har [Horus] in the city of Meng.
16. The dweller in the city of Ment in the white palace.
17. Nushim, lady of the city of Au-kaf.
18. Mentu Har in Uas [Western Thebes Hermonthis].
19. Athor mistress of An aa [Tentyris, Denderah].
20. Bast [Bubastis] in Pabast [Bubastis].

PLATE III, COL. D.

1–3. Mutilated or wanting.
4. Har shaf [Terrible face, a surname of Khnum], king of the upper and lower world dwelling in the town of Suten khen (Heracleopolis).
5. Athor, mistress of Apikaut [Athribis].
6. Neith, Sebak, Har [Horus] in the Town of Tena [This].
7. The making of libations, and the titles of the table of offerings.

I.	II.
8. The great Table	Heads of . . . . two hands.
9. The stand	a vase of libation.
10. Four pots	a jar for washing
11. Four pints of water	which is on the washing basin (refers to 10, II).
12. Four mugs of water	eight jars of sea water.
13. Eight pints of water	a pot of Southern wine.
14. A great Altar	two pots of Northern wine.
15. The little Altar	two jars of wine of . . . . .
16. Four stands	three jars of wine and spirits.
17. The Altar	wine of Bau.[2]
18. Two great pans of water	wine of Fishermen.
19. Ten basins of water	two jars of wine of Anhu.
20, 21. Mutilated and illegible.	

[1] Or, Ruau, a city mentioned in the campaign of Una.

[2] Or, Bau-en-Har, an undetermined site over which Khnum presided. Brugsch, *Geographisch. Inschrift*, Tab. LVI, No. 1748.

This monument mentions several towns either hitherto unknown or not identified. Unfortunately, however, it gives no clue to their position beyond the vague expression, 'gods of West and South.'

There are also a few new words in this inscription, as in C, line 12, meaning the 'things,' khet or 'riches' in the Treasury. It is found in the form khet in the tomb of Merkat, Lepsius, *Denkm.*, Abth. II, Bl. 22 *a*, in the sentence *maa khet ant saten-a*, "Inspection of things brought to the royal house." Most of the words in E, lines 9–19, unexplained are new, as *tena* 'a stand.' *mab* or *ab* a kind of 'vase' basket-shaped. *menga.t* 'a pot' or 'mug.' *mensa* 'a pear-shaped vase' holding about half a pint, often found in alabaster. *kamt* 'an ampulla' or little vase. *bau* 'a stand, holding a vase.' *kakanti* or *ka en ti ka* 'a bottle' or small vase of wine, perhaps a variant of *kat* or *kata*, Brugsch, *Wörterbuch*, s. 1520, or of *kai* a pint, ibid. 1506. *absh* 'an olla,' showing that the form *arp absh* does not mean 'white wine,' but 'wine one *absh*' or olla, which was perhaps of a white colour.[1]

[1] Some account of this monument is given by Orcurti, Catalogo dei monumenti Egizii di Torino. 8vo. Torino, 1852, p. 80, No. 24.

REVISED TRANSLATION

OF

THE DESCENT OF ISHTAR,

WITH A FURTHER COMMENTARY.

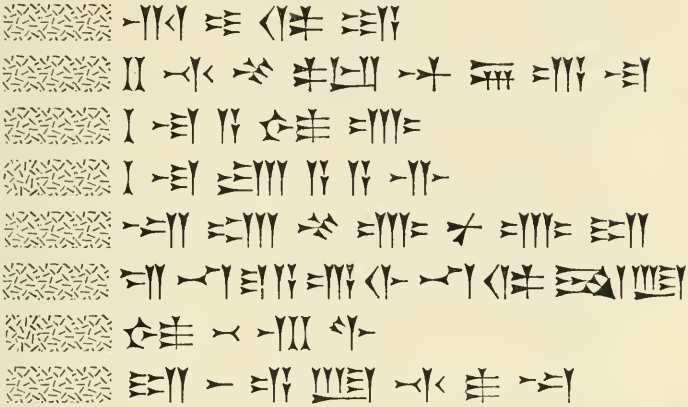
By H. F. Talbot, F.R.S., &c.

Read May 5, 1874.

Since my translation of this Legend was submitted to the Society I have been enabled to improve it in various ways. In this I have been much aided by a translation which Mr. G. Smith published in the Daily Telegraph of 19th August last, which throws much new light upon the Legend. From my translation it differs in various particulars: one of the chief being this, that the word *Nin*, which I rendered "*Lord*" Mr. S. renders "*Lady*." In order to explain how this difference could arise I must observe that the word *Nin* has both meanings. I will give proofs of this in the Appendix to this paper. Now, in the present Legend the word *Nin* is in one passage (Col. I, line 24) exchanged for *Sarrat* (Queen) which therefore removes all ambiguity.

Mr. Smith has also discovered in the British Museum a small fragment of a duplicate copy of the Legend. Small as it is, it is very valuable, for it clears up the sense of the beginning of the Legend, by giving us the ends of several lines which are broken off in the original tablet. This duplicate copy differs from the original in that Ishtar relates her story in the first person. The scribe has therefore expunged lines 2 and 3 of the legend as superfluous, viz. "*Ishtar daughter of the Moon-god San resolved to go there.*"

The following is a copy of the new fragment :—

1. 

N.B. The beginnings of all the lines are broken off. The figures denote the lines of the original tablet which differ somewhat in order from the other one. There is also a small but useful fragment belonging to the second column, which I will notice in its proper place.

A correct translation of this difficult legend is a thing not to be obtained at once, as witness the diverging explanations which have been given of portions of it by Lenormant and others. But the difficulties become solved by degrees. If the tablet were not so much fractured, the task would have been much easier.

I believe the most convenient way will be for me to place my new translation of the Legend first, and afterwards in an Appendix to give the reasons for the alterations which have been made, and an explanation of certain difficult words and passages. I have seldom added the cuneiform text, because it has been for the most part correctly given in my former memoir. And of the former commentary a considerable part is left unaltered.

Revised Translation.

COLUMN I.

1. To the land of Hades, the land of her desire,
2. Ishtar daughter of the Moon-god San turned her mind,

3. and the daughter of San fixed her mind [*to go there*]:
4. to the House where all meet: the dwelling of the god Irkalla:
5. the House which those who enter it, never come out:
6. the Road which those who travel it, never return:
7. the House which those who enter it, are deprived of Light:
8. where Earth is their food; their nourishment Clay:
9. Light is not seen; in darkness they dwell:
10. Ghosts, like birds, flutter their wings there:
11. upon the gate and the gate-bars the dust lies undisturbed.

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12. When Ishtar arrived at the gate of Hades
13. to the keeper of the gate a word she spoke:
14. "O keeper of the entrance! open thy gate!
15. "Open thy gate, I say again, that I may enter!
16. "If thou openest not thy gate, and I enter not,
17. "I will assault the door: I will break down the gate:
18. "I will attack the entrance: I will split open the portals:
19. "I will raise the dead, to be the devourers of the living!
20. "Upon the living, the dead shall prey!"[1]
21. Then the Porter opened his mouth and spoke,
22. and said to the great Ishtar,
23. "Stay, Lady! do not shake down the door!
24. "I will go, and tell this to the Queen[2] Nin-ki-gal."
25. The Porter entered, and said to Ninkigal
26. "These curses thy sister Ishtar [*utters*][3]
27. blaspheming thee with great curses" [. . . . .]
28. When Ninkigal heard this [. . . . .]
29. she grew pale, like a flower that is cut off:
30. she trembled like the stem of a reed:
31. "I will cure her rage, she said, I will cure her fury

[1] This very violent language is evidently introduced by the writer of this Legend, in order to justify the subsequent wrath of Ninkigal.

[2] Ninkigal answers to the Proserpine of the Latins. Her name means "goddess of the great region" *i.e.* Hades.

[3] The end of this and several following lines is broken off, which makes the translation uncertain.

32. "these curses I will repay to her!
33. "Light up consuming flames! light up blazing straw!
34. "Let her doom be with the husbands who deserted their wives!
35. "Let her doom be with the wives who from their husband's side departed!
36. "Let her doom be with the youths who led dishonoured lives!
37. "Go, Porter, open the gate for her,
38. "but strip off her jewels, like those of former people."[1]
39. The Porter went and opened the gate.
40. "Enter, Lady of Tiggaba city! It is permitted!
41. "The Sovereign of Hades will come to meet thee!"

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42. The first gate admitted her, and stopped her: there was taken off the great Crown from her head.
43. "Keeper! do not take off from me, the great Crown from my head!"
44. "Enter, Lady! for the Queen of the land demands her treasures!"

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45. The second gate admitted her, and stopped her: there were taken off the earrings of her ears.
46. "Keeper! do not take off from me, the earrings of my ears!"
47. "Enter, Lady! for the Queen of the land demands her treasures!"

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48. The third gate admitted her, and stopped her: there were taken off the precious stones from her head.
49. "Keeper! do not take off from me, the precious stones from my head!"
50. "Enter, Lady! for the Queen of the land demands her treasures!"

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[1] Whose jewels were not carried to the tomb: where Ishtar was now of her own free will descending.

51. The fourth gate admitted her, and stopped her: there were taken off the small lovely gems from her forehead:
52. "Keeper! do not take off from me, the small lovely gems from my forehead!"
53. "Enter, Lady! for the Queen of the land demands her treasures!"

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54. The fifth gate admitted her, and stopped her: there was taken off the central girdle of her waist:
55. "Keeper! do not take off from me, the central girdle of my waist!"
56. "Enter, Lady! for the Queen of the land demands her treasures!"

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57. The sixth gate admitted her, and stopped her: there were taken off the golden rings of her hands and feet:
58. "Keeper! do not take off from me, the golden rings of my hands and feet!"
59. "Enter, Lady! for the Queen of the land demands her treasures!"

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60. The seventh gate admitted her, and stopped her: there was taken off the last garment from her body:
61. "Keeper! do not take off from me, the last garment from my body!"
62. "Enter, Lady! for the Queen of the land demands her treasures!"

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63. After that mother Ishtar had descended into Hades,
64. Ninkigal saw her, and derided her to her face.
65. Ishtar lost her reason, and heaped curses upon her.
66. Ninkigal opened her mouth and spoke;
67. to Namtar her messenger a command she gave:
68. "Go, Namtar . . . . [*some words lost*]
69. "Bring her out for punishment . . . . . ."[1]

[1] The end of this line is lost, and all the remaining lines of Col. I are similarly mutilated; I will therefore give their meaning in an abridged form. Namtar is commanded to afflict Ishtar with dire diseases of the eyes, the side, the feet, the heart, and the head. The story then says that after the goddess of Love had descended to Hades, the world soon felt the loss of her influence. But as these lines are much broken, and are better preserved in the Second Column, where they are repeated, I omit them here.

Column II.

1. The divine messenger of the gods lacerated his face before them,[1]
2. He tore his vest. Rapid words he spoke.
3. The Sun approached: he joined the Moon his father.
4. Weeping they spoke thus unto Hea the king:
5. "Ishtar descended into the earth: and she did not rise again,
6. "and since the time that mother Ishtar descended into Hades
7. "the bull has not sought the cow, nor the male of any animal the female.
8. "The slave and her master . . [*some words lost*]
9. "The master has ceased from commanding;
10. "The slave has ceased from obeying."
11. Then the god Hea in the depth of his mind laid a plan:
12. he formed, for her escape, the figure of a man of clay.[2]
13. "Go to save her, Phantom! present thyself at the portal of Hades;
14. "the seven gates of Hades will open before thee,
15. "Ninkigal will see thee, and will come to meet thee.
16. "When her mind shall be grown calm, and her anger shall be worn off,
17. "awe her with the names of the great gods!
18. "Prepare thy frauds! On deceitful tricks fix thy mind!
19. "The chiefest deceitful trick! Bring forth fishes of the waters, out of an empty vessel![3]
20. "This thing will astonish Ninkigal:
21. "then to Ishtar she will restore her clothing.
22. "A great reward for these things shall not fail.

[1] A sign of violent grief in the East. Forbidden in Deut. xiv, 1, Lev. xix, 28. The bleeding face betokened a Messenger of Evil News.

[2] The original has *Assinnu*, which I have derived from the Chaldee word *Sin* 'clay.' But this is a mere conjecture. The meaning evidently is that Hea moulded a figure and breathed life into it. Hea was the god to whom all clever inventions were attributed. "*Lord of deep thoughts*" was one of his most usual titles.

[3] The present legend was probably a kind of Miracle Play, which was actually performed in one of the temples. Juggling tricks, which have been known in the East from time immemorial (vide Pharaoh's magicians) were probably introduced for the amusement of the audience. Only one is related here, but there may have been many more.

23. "Go save her, Phantom, and the great assembly of the people shall crown thee!
24. "Meats, the first of the city, shall be thy food!
25. "Wine, the most delicious in the city, shall be thy drink!
26. "A royal palace shall be thy dwelling!
27. "A throne of state, shall be thy seat!
28. "Magician and Conjuror shall kiss the hem of thy garment!"

29. Ninkigal[1] opened her mouth and spoke;
30. to Namtar her messenger a command she gave:
31. "Go, Namtar! clothe the Temple of Justice![2]
32. "Adorn the seats and the . . . . . .
33. "Bring out Anunnak![3] Seat him on a golden throne!
34. "Pour out for Ishtar the waters of life, and let her depart from my dominions!"
35. Namtar went, and clothed the Temple of Justice,
36. he adorned the seats and the . . . . . .
37. he brought out Anunnak; on a golden throne he seated him,
38. he poured out for Ishtar the waters of life, and let her go:
39. Then the first gate let her forth, and restored to her—the first garment of her body,
40. The second gate let her forth, and restored to her—the ornaments of her hands and feet.
41. The third gate let her forth, and restored to her—the central girdle of her waist.
42. The fourth gate let her forth, and restored to her—the small lovely gems of her forehead.
43. The fifth gate let her forth, and restored to her—the precious stones of her head.
44. The sixth gate let her forth, and restored to her—the earrings of her ears.
45. The seventh gate let her forth, and restored to her—the great Crown on her head.

[1] The things commanded are now supposed to have been successfully performed.

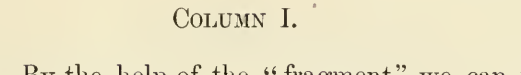
[2] This seems to be the final scene of the Play, representing a magnificent hall or palace.

[3] A Genius, who is often mentioned. Here he seems to act the part of a judge, pronouncing the absolution of Ishtar.

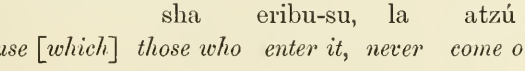
Appendix of Notes and Explanations.[1]

Column I.

Line 1. By the help of the "fragment" we can restore the end of this line *kakkari idi-sha.* But its meaning is doubtful. It may mean that she resolved to go "to the land of Hades, the land *of her beloved*," viz. Thammuz-Adonis, who was detained in Hades by Proserpine. If so, *idi* must be from the Heb. ידיד *idid* dilectus: amicus: root ידד dilexit. Or, it may only mean, "to the land of Hades, the land *of her desire*," viz. the land she desired to visit.

Line 4. Hades is here called  *Bit Edi* or *Bit Hedi*, בית עדה, "the House of Assembly," because the spirits of all past generations are assembled there. Heb. עדה cœtus, conventus, turba. In the Syriac N. Test. עדתא is continually used for 'Ecclesia' the assembly.

Similarly in Job xxx, 23 Hades is called בית מועד 'the house of assembly,' to which is added לכל חי 'of all living.' Gesenius says: "locus quo omnes homines conveniunt: (dicitur de Orco)." For the same reason, in Homer's hymn to Ceres, Pluto has the *names* (not mere *epithets*) of *Πολυδεκτης* and *Πολυδεγμων* "he who receives many."

Considering this Eastern usage of the word *Hedi* עדה, I think it probable that the Greek '*Hades*' is derived from it. The 'fragment' in this line appears to read *Bit Aditi*  . The meaning however would be the same.

At the end of line 4 the name of the god *Irkalla* is supplied from the fragment.

Line 5. The syntax is:

Ana bit	sha	eribu-su,	la	atzú
To the house [*which*]	*those who*	*enter it,*	*never*	*come out of it.*

[1] N.B. The cuneiform text of the whole is in vol. 2, p. 187, and following pages.

Line 7. A similar syntax:

Ana-bit	sha	eribu-su,	zummu
to the house [which]	*those who*	*enter it,*	*are deprived of*

nura
light

Nura is supplied from the fragment.

Zummu, Heb. צמא sitivit: avidè desideravit (*Ges.*) *zummu nura*, they thirst for light.

Line 8. *Bubut-zun* 'their food.' So in Tiglath-Pileser, col. viii, 85, a famine is called *zunka bubuta* (want of food) *khusakha* (necessary).

Ibid. [cuneiform] *Ditthu*, 'clay.' This word is restored from the fragment. It is the Heb. טיט lutum: argilla.

Line 9. The last word is taken from the fragment [cuneiform] *Ashba* 'they dwell.' Heb. ישב to dwell.

Line 10. The last word in this line is [cuneiform] *Kappi* in the fragment; from whence it is manifest that the other copy (the one lithographed) read [cuneiform] gap-pi before it was broken, of which only [cuneiform] now remains. This line 10 is curious and important.

[cuneiform]

Kal-su-ma	kima	izzuri	zuziz	gappi
and their ghosts	*like*	*birds*	*flutter*	*their wings*

The first word is *Kal* 'a ghost.' Schindler's Lex. p. 543 says, חול or חיל spectrum: phantasma nocturnum (*Arabicè*). Catafago's Arabic Dictionary p. 105 and 555 has *Khayl* imago: ιδεα. Sir G. Wilkinson in his Thebes p. 581 has *Khiál* 'a shadow.' Richardson's Arabic Dictionary has *Khayál* 'a ghost.'

Zuziz gappi 'flutter their wings.' *Zuziz* is a conjugation of Heb. צוצ 'to flutter,' whence ציצ 'a wing' (see Furst's Lex.) connected with זוז *zuz* and זיז *ziz*, which are explained 'motus celer (animalium).' Another form is the Heb. נצצ 'volavit,' which easily drops the initial N.

Gappi 'wings' is the Ch. and Syr. גפא *gapa*. a wing.

Zuziz is written . The sign is very frequently employed for *ziz*. *Example: Lizziz-zu* sometimes written , sometimes . See vol. 2 p. 351 of the Transactions.

Line 11. 'upon,' 'the gate' (*u sakkul*) and the gate-bars *sabukh*, lies at rest, *ibru*, the dust.

Sakkul is probably the same as *sakkur*. Ch. סכר the bar of a gate: *repagulum*.

Sabukh is the Ch. and Syr. שבק relictus est.

Ibru 'dust.' Heb. עפר pulvis. In the oblique case it makes *ibri* . *Example:* "They destroyed that city and reduced it to *dust* and desolation," ana ibri u karmi utirru. This is instead of the usual phrase *ana til u karmi*. 4 R 34, 33.

Line 12. *As kasadi-sha* on her arrival;—*Kasad* means 'to arrive at a place,' *ex. gr.* Behist. line 66, "I sent troops to aid Hystaspes and," arkhi sha uku ana eli Ustaspi *iksudu*, after the forces *had reached* Hystaspes [he was enabled to conquer his enemies].

Line 16. *Summa* 'if' or 'when'—a frequent adverb.

Line 19. *Usillá* I will raise. *Sha* conjugation of עלה to rise: "to cause to rise," *i.e.* "to raise." *Usillá mituti,* I will awake the dead. In 4 R 27, 9 we read *ardata antaki-sha usillú*, the girl awoke her mother [to escape from some danger]. In this passage the word *antaki* is unknown to me, but the Accadian version has . 'her mother.' I have therefore so translated it. Another example from the Bellino cylinder line 50, *ultu mami usela-mma* "and I raised it up above the waters," written .

Line 20. *Imahidu* is a doubtful word. I would derive it from the Chald. עדא præda, Heb. עד, and so render it "they shall prey": compare Genes. xlix, 27, יאכל עד he shall devour the prey.

Line 23. *Iziz* stay! or stop! *Ziz* is "stare" to stand still.

Ibid. La tanadassi, do not shake it down! root Heb. נוד *nud* agitavit. Hithp. huc illuc agitari. Furst says: 'to move to and fro.'

Line 24. *Lullik mukilu sa anni ana sarrati Ninkigal*, I will bring word of this to the queen Proserpine.

Mukilu a word or saying. Arab. *muqāl*, a saying. Catafago's dictionary (*qal* to say: *qil* it is said. *Muqalah*, a speech, Schind. Lex. p. 1599.

Line 26. *Mie* are probably 'curses,' from Ch. ימי or ימה juravit. This verb is used in the sense of exsecratio blasphemia (Buxtorf, p. 956).

Ibid. Akhata, sister.

Line 27. *Nukabtu* a Cursing or Blaspheming, from נקב maledixit. Schindl. Lex. p. 1156.

Kippi, curses. From the same root קבב to curse, which is the same as נקב. Another Assyrian form of the same word is *Kubie* 'curses,' which I have given in my Glossary No. 453. And see the verb קבב maledixit, exsecratus est, in Gesenius.

Line 29.

Kima nikis isbi iru(ku)

Like a cut off flower she grew pale.

Nikis 'cut off.' The phrase *nikis kakkadu* 'the decapitated head' occurs frequently in the annals of Assurbanipal.

Isbi a flower or green herb. Heb. עשב herba. Ch. עשבא. See art. 115 of my Glossary. The word occurs also in Opp. Khors. 3, 27 written *Ishbi.*

Iruku, she grew pale, Heb. ירק pallescere, used in Hebrew of paleness of the face caused by sudden emotion. And so also in Assyrian, *ex. gr. panú-ka val urrak* thy face shall not grow pale (from fear, in the battle)—annals of Assurbanipal page 125: written *urrak.*

Line 30.

Kima sapat kunini izli

Like the stem of a reed she was shaken.

Sapat a rod or stem. Heb. שבט virga, scapus. Gesenius compares the German *Schaft*, the stem.

Kunini appears to be a form of Heb. קנה Lat. Canna a reed.

Izli from Heb. זלל *zelel*, quassavit concussit: also 'contremuit' (Gesen.). We frequently find in the inscriptions *nir izlu* jugum excusserunt.

Line 31. *Miná libba* . . . . . *miná kab*(*at-sa*). The end of the line is broken off.

Miná 'a remedy' occurs several times on the tablets.

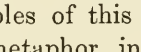
Libba (the heart) and *Kabat* (the liver) are very often used together, as here: see my Glossary No. 500 where I have collected many examples of this usage. Both words are continually used, by a metaphor, in the sense of 'rage' or 'anger.'

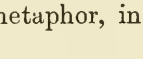
Upla 'I bring' or 'I will bring.'

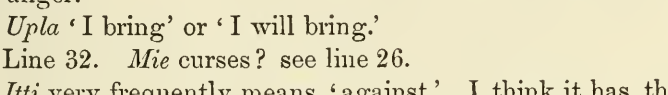
Line 32. *Mie* curses? see line 26.

Itti very frequently means 'against.' I think it has that sense here.

Lines 33, 34, 35, 36. I have fully considered these lines in my paper "on the punishment of the wicked" printed in vol. 2 p. 346 of the Transactions, to which I refer.

Line 38.  *Panni* signifies 'treasures' or 'jewels,' which are *Paninim* פנינים in Hebrew: see Schindl. Lex. p. 1451 who renders the word by '*gemmæ*.'

 is fully explained in the Syllabary No. 346 and 347 as follows:



from whence we see that signified *Garza*, *Parzu*, and *Billudu*. Now, I shall proceed to show that each of these three words signifies "treasure."

In the first place *Garza* is the same as Chald. *Ganza*, Gr. and Lat. *Gaza*, a word which seems to have been widely diffused throughout the Eastern world. *Garza* seems only a broader pronunciation of *Gaza*.

In the second place *Parzu* has the same meaning. The

word occurs in the plural *Parzi* 'treasures' in the annals of Ashurakhbal col. i, 24 in the following passage, where he is called "the just sovereign, who for the protection of the *treasures* of the temples of his land took incessant care." And here it is very remarkable that the other copy of the inscription does not read *parzi* but *panni* being exactly the word employed in the legend of Ishtar.

In the third place, *Billudu* likewise signifies "treasure," see Bellino line 37. "A splendid place, a storehouse of every kind, a building of safety for all their treasures they erected within it." Here the plural word *billudi* expresses 'treasures.' Another example of this word is found in Sir T. Phillips' cylinder, col. ii, l. 51. "The splendid diadems and golden jewels of Ishtar[1] of X, the lady of X city, which were most valuable, I restored to their place and gave them to X city." These valuables had been plundered by some former king from the temple of Ishtar. The word 'jewels' in the above passage is in the original *billudi*. The word which I have translated 'golden' is *kutmuti*, from כתם 'gold.' But perhaps it rather means 'ancient' from קדם 'ancient.'

Hence we have a triple proof that *panni* here means 'jewels,' and *kima panni labiruti* 'like former jewels' or, 'like the jewels of former people.'

Line 40. *Irbi*, enter! The verb ערב is so frequently used in Assyrian in the simple sense of 'to enter' that I have adopted it here as the most probable rendering. I have likewise reverted to my original translation of "Tiggaba city," finding that Ishtar was worshipped there and probably with especial honours.

Ibid. Iiresha, it is permitted: it is lawful, (*liceat tibi*) from the Chald. רשא licuit ei: potestatem habuit.

Line 41. (The sovereign of Hades) *likhdu as pani-ki*, will

[1] I have put X for the name of the city, not being certain of the pronunciation.

come to meet thee. At first I supposed *likhdu* was a tense of חדה to be glad, but I now think it is a tense of יחד to meet, join, unite (in French se réunir). See *likhdu* again in col. ii, 15.

Line 44. I have fully explained *Panni* to mean 'jewels' or 'treasures' in my note to line 38.

Kiham or *Kiam* 'a decree' Ch. קים edictum regium *ex. gr.* Dan. vi, 8. Sometimes it means in Assyrian a speech, or a mere sentence, but I think *only when it is a Royal personage who speaks.*

Line 54. *Sibbu taktu*, the central girdle. *Taktu* from Heb. תוך *tuk* the middle.

Line 60. *Zubat*, a Veil. Heb. צעיף velum mulieris.

Bulti is the Assyrian form of the Hebrew *Busti* בשת 'pudor.' *Zubat bulti*, velum pudoris.

Zumri 'the body' is a very frequent word.

Line 64. Vidit eam. *Imur-si.*

Ibid. *Irahub*, she derided her, *as pani-sha*, to her face. (scil. nudam videns irrisit ei). Heb. רחב *rahab* dilatare. Gesenius quotes Ps. lxxxi, 11, *irahib pi* latè aperuit os (in quendam) quod est irridentis et deludentis. Furst agrees in this explanation.

Line 65. *Val immalik*, she lost her reason, or judgment: from Ch. *malik* מלך consilium.

Ibid. *Usbi*, she swore. Heb. שבע juravit.

Ibid. *Elinu-ssa*, against her. She uttered imprecations upon her.

Line 69. *Suza-ssi ana sulim*, bring her forth for punishment. This verb is frequent. In col. 2, 33 *Suza* bring forth (the spirit Anunnak!)

Ibid. *Sulim* punishment. Heb. שלם or שלום retributio: and verb שלם rependi, retribui.

Line 75 is so much broken as to be doubtful, but perhaps it reads *Ana shasa*, 'on herself,' or 'on her person' *gabbishá-ma*, tread! Heb. כבש pedibus conculcavit (Gesen.). Sed forsan כבש hoc loco eo sensu sumendum quo in Esther vii, 8.

The rest of this column is so broken that I pass it over and proceed to the second column.

Column II.

Line 1. *guddut*, he tore, *appa-su* his face, *panu(ssun)* before them. This verb is the Chald. גדד *gudud*, incidit seipsum usque ad sanguinis effusionem (Schindler p. 277) or, laceravit in luctu carnem. It is the verb used in the story of the Priests of Baal cutting themselves with knives, 1 Kings xviii, 28.

Line 2. *Karru* 'he tore' is the Heb. קרע to tear. Gesenius says, disrupit, discidit, *ut vestes in luctu.*

Ibid. *Labish* 'his vest' is the Heb. לבש vestis.

Ibid. *Malie*, words. Heb. מלה verbum.

Ibid. The broken word *na* was perhaps *nabu* Heb. נבא, which Gesenius renders *ebullivit:* copiosè *effudit* sermonem, ut faciunt qui cum animi ardore vel divinâ mentis permotione loquuntur. It is nearly the same, he says, as נבע ebullivit which is similarly used of excited speech.

Line 3. The broken word at the end of this line may have been *ikhid*, he joined. Heb. יחד to join, unite: which verb occurs elsewhere in this legend.

Line 4. *Dimá*, weeping. Heb. דמע lacrimavit.

Line 5. *Urid*, she descended. Heb. ירד to descend. In the next line we have the pluperfect tense *uridu* she has descended.

Line 7. *Burti*, a heifer. Gr. *Πορτις:* for *buhurti*, from בקר vacca.

Ibid. *Isukkhit* Heb. שקט. Buxtorf p. 2332 and Schindler p. 1811 say that שקט and שדך are the same verb (per metathesin) and שדך is 'copulavit conjuges.'

Ibid. any animal. its female. *Usara* is Heb. שרח prurivit. Schindl. p. 1946.

Line 9. *Itziz*, stopped or stayed. Hithp. of *ziz* to stand still. The broken word at the end is a command.

Line 10. *In akhit-sha*, in her obedience. See Ges. p. 439 יקהת obedience.

Line 11. *Imki* is *profunditas*, the same as *Nimiki*. From עמק profundus. The next verb is the *tan* conjugation of בחר, to select, choose, or approve.

Line 12. *Assinnu* may be a figure of clay from the Chald. *Sin* 'clay.' Or perhaps it means 'powerful,' from the Syriac חסן potens, חסינא præpotens—for, the figure was powerful as a magician, and Syr. עשן has nearly the same meaning.

Line 15. *In pani-ka likhdu*, she will come to meet thee from יחד to meet; see the same phrase in col. i, line 41 *likhdu as pani-ki*.

Line 16. Here again we have *libba-sa* and *kabat-sa* joined together in the sense of 'her rage and her fury': see col. 1, line 31.

Ibid. Inukkhu, shall have grown calm. Heb. נוח quiescere.

Ibid. Ippisiddu from פשט to remove.

Line 18. *Sukin reshi-ka*, prepare thy tricks! *reshi*, from Heb. רשע deceit.

Line 20. *Annitu assemi-sha*, 'this will astonish her,' from שמם to astonish.

Line 21. *Takhash ur-sha*, nuditatem ejus velabit; from כסה texit, vel operuit.

Ibid. Ur, Heb. עור 'nuditas,' occurs frequently.

Ibid. Tassuka she will cover or veil. see Furst p. 935, from נסך to cover or veil: whence in Isaiah xxv, 7 we have מסכה a veil, and *nasuk* to veil or cover. The passage is המסכה הנסוכה על כל הגוים 'the veil which covers all people.'

Ibid. Tassuka uban-sha, she will clothe her with her clothes. *Uban* clothes: linen. Heb. עיפא linteum (Schindl. p. 1294). עוף convolutus, vel involutus fuit: in Hebrews i, 12 it means 'involvere *sicut amictum* seu *pallium*.' Furst has a verb עוב much the same, 'to enwrap or veil.' *Uban* is a plural, like *alan* 'cities'; *nasikkan*, 'princes.'

Line 23. I will here notice another small fragment which has been found in the Museum. Instead of *lu-zir*

it reads (𒀭𒀭𒀭) 𒁹𒁹𒁹 𒌋𒌋𒌋 *luzzur:* The sense however remains the same; "the great assembly of the people shall crown thee"—give thee a civic crown as a public benefactor. *Zir* is related to the Syriac *zira* torques, a chain of honour: root זרר. *Uzzur* to *Nazir*, a crown. But these words are all related.

Ibid. Izra raba 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹 is, the great assembly of the people. Heb. עצרה concio populi, *πανηγυρις. Ges.* elsewhere called in the Assyrian inscriptions the *Haga tsira* 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹 or great Festival (Heb. חג Festum). See Tiglath Pileser i, 21.

The five optatives in lines 23, 24, 25, 26, 27 namely, lu-zir-ka, lu-akal-ka, lu-maltit-ka, lu-manzaz-ka, and lu-mushabu-ka, correspond to each other.

Line 27. 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹 *asgubbat* 'a couch,' 'throne,' 'seat of honour': from Heb. שכב cubare, to recline.

Line 28. *Zulit.* Heb. *Sul* שול the hem of the garment. Schindl. 'extremitas vestis.' Buxt. 'fundum, vel imum rei. Gesen. 'ora vestis.' Furst 'the hem or lower edge.' Authorized version in Ex. xxviii, 33 where it occurs twice: '*Upon the hem of it*' (the robe) . . . . . '*round about the hem thereof.*'

Ibid. Usikha 'shall kiss,' from נשק to kiss, fut. ישק. Or perhaps the verb is שחה se prostravit, a verb frequently employed.

Line 31. *Makhash*, probably means 'clothe!' Heb. מכסה tegumentum, vestimentum, *i.e.* 'adorn the temple with hangings!'

Line 32. 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹 *Ilu* may be *seats* or *couches*, for Mr. Smith in his phonetic values No. 130 makes it equivalent to *asgubbu.*

Line 34. *Lika-ssi hedri-ya* let her go from my palace, or, from my dominions! *Lika*, the hiph. of הלך to go means 'to send away.'

Hedri. Heb. חדר habitatio, penetralia: Prov. vii, 27, dicitur de Orco חדרי מות *Gesen.* (as in the present passage).

Line 35. *Imkhash*, he clothed, or adorned with hangings.

Line 38. *Ilka-ssi*, he let her go. Hiph. of הלך as before

The legend proper ends with line 45, when Ishtar has past the seventh gate and has received back all her ornaments. The lines which follow are mostly obscure: the first of them is, I think, some direction given to the actors of this Miracle-Play.

Summa napdiri-sha la taddi, if thou knowest not *her liberation* [*i.e.* a song so called, which ought now to be sung?] *nakkan-ma* then play on the harp (נגן *nagan* psallere) *ana shasha-ma tar-ma*, and to some joyful tune strike the strings! I think that 𒌋 𒌋 *shasha* is the Heb. שש gaudium, and that *Tar* is the Arab. יתר *chorda*.

Napdiri 'liberation' is from the Heb. פטר to liberate.

M. Lenormant has recently published a revised translation of this legend (*Premières Civilisations*, vol. 2, p. 84–93). He adopts the majority of the changes proposed by Mr. G. Smith and myself,[1] so that there is now little difference of opinion with regard to the general meaning of the legend and the tenour of the events related—always excepting the passage lines 100–108 in which there is a great variety of translation.

[1] In Records of the Past (vol. i, p. 143–149) and the Daily Telegraph.

NEMROD ET LES ÉCRITURES CUNÉIFORMES.

Par Josef Grivel.

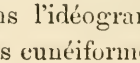
Read 7th April, 1874.

Les inscriptions cunéiformes trouvées dans la Mésopotamie, nous ont révélé les noms de plusieurs rois antiques appartenant aux premières dynasties de l'empire de la Chaldée. Mais aucun de ces noms n'a encore été identifié avec ceux qui nous sont connus par la Bible ou par l'histoire profane.

Le nom même de *Nemrod*, le fondateur de la dynastie des Couśhites, n'a pas été reconnu sur les briques retirées des ruines des villes où fut le commencement de sa domination. C'est ce que constatait Mr. E. Schrader, l'année dernière, dans son savant ouvrage, *Les écritures cunéiformes et l'Ancien Testament*, pp. 16 et 17.

Cela ne paraîtra pas surprenant si l'on réfléchit qu'à l'époque où furent écrites les plus anciennes inscriptions trouvées en Chaldée, Nemrod devait déjà appartenir aux temps héroïques de son pays, comme Assur, le fondateur de Ninive, qui, pas plus que le premier roi de Babylone, n'a laissé des monuments écrits de sa domination.

Aussi bien n'est-ce pas sur les briques déposées dans les fondations des temples et des autres édifices de l'ancienne Chaldée, que l'on peut espérer de retrouver les traces du premier conquérant; il faut les chercher dans les légendes et dans la mythologie des Babyloniens et des Assyriens.

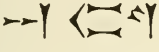
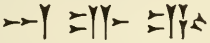
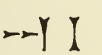
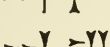
Dans l'appendice, tiré à part, d'un article paru dans la Revue de la Suisse catholique en Août 1871, sous le titre, Le plus ancien Dictionnaire, j'avais émis l'idée que le nom de Nemrod se trouvait dans l'idéogramme  *Amar-ud*, par lequel les textes cunéiformes expriment le nom

du dieu Mérodach et qu'en conséquence, celui-ci n'était autre que le fameux Nemrod, mis au rang des dieux dans le panthéon assyro-babylonien.

Ce qui n'était alors qu'une conjecture pour moi, étant devenu une conviction, je veux soumettre à l'appréciation et à la critique de nos maîtres en assyriologie, les considérations sur lesquelles elle s'appuie.

Le nom du dieu Mérodach, *Marduk* et *Maruduk*, est écrit de diverses manières dans les textes cunéiformes.

Mr. E. Norris a recueilli et noté les suivantes, dans son Dictionnaire assyrien, p. 853 :—

1.  phonétiq. : *Amarud.*
2.  „ *Marduk.*
3.  „ *Su.*
4.  „ *Mis, sit, &c.*

Il faut y ajouter :

5. phonétiq. : *Silik mulu-khi.*

Cette dernière forme se rencontre dans des textes magiques et mythologiques, en idiome accadien,[1] cités par Mr. F. Lenormant dans son intéressante étude, *Les sciences occultes chez les Chaldéens* (Correspondant, Octobre et Novembre 1873).

M. Lenormant fait remarquer que les textes magiques cités n'appartiennent pas à la religion primitive de la Chaldée et que quelques-uns paraissent être d'une époque relativement récente. Aussi l'expression *Silik-mulu-Khi*, qui est un titre qualificatif, plutôt qu'un nom dans le sens ordinaire, n'est pas la forme la plus ancienne. Dans la version assyrienne de ces textes, *Silik-mulu-Khi* est rendu par la première notation *Amar-ud.* Celle-ci apparaît, pour la première fois, dans les inscriptions de Hammourabi

[1] Ancien idiome de la classe des langues agglutinatives, dans lequel sont rédigées les plus anciennes inscriptions de la Chaldée, et dont M. F. Lenormant a donné l'histoire et la première grammaire dans ses Etudes accadiennes.

dont l'existence, suivant les assyriologues, remonterait à environ 1600 ans avant notre ère. C'est aussi la seule que l'on rencontre dans l'énumération des dieux que les monarques de Babylone et de Ninive invoquent dans leurs inscriptions. Il ne paraît donc pas douteux qu'elle ne soit la plus ancienne et qu'elle ne couvre le nom antique du dieu qui a été adoré beaucoup plus tard sous le nom, étranger à la langue assyrienne, de *Marduk* ou Mérodach. Dans ces invocations, les noms des autres dieux sont, le plus souvent, écrits en idéogrammes, c'est-à-dire avec des signes dont la prononciation syllabique donnait le nom du dieu en langue accadienne, mais que les Assyriens lisaient dans leur langue. Ainsi le nom du dieu Nébo est ordinairement écrit *An-Ak*, en accadien ; mais les Assyriens le lisaient, *Nabium* dans leur langue.

Les syllabaires d'Assourbanipal et les variantes des textes identiques ou parallèles nous ont fait connaître les noms assyriens de ces dieux et nous ont permis de les identifier avec ceux que nous connaissons par l'histoire sacrée et profane, comme Oanes (Anum), Assur, Bel, Nebo, Samas, Sin, &c.

L'idéogramme *Amar-ud* a pareillement été identifié avec Mérodach par la lecture du nom de Mérodach-baladan qui est écrit, *Amar-ud-séna* dans les inscriptions cunéiformes et transcrit dans la Bible (Isaïe xxxix, 1), par מראדך בלאדן Mérodac-baladan.[1]

Mais *Marduk* n'est pas un nom assyrien, ni sémetique ; c'est un nom purement accadien, ainsi que tous les assyriologues doivent en convenir. Il devait donc aussi répondre à un nom, à une forme assyrienne renfermée dans l'idéogramme *Amar-ud*. C'est ce nom assyrien dont il s'agit de rechercher la lecture, l'expression vocale. Pour la trouver, il n'y a qu'à suivre le procédé philologique employé pour découvrir les noms assyriens cachés sous une

[1] La lecture *avarud* pour *amarud*, parait avoir été usitée à côté de celle de *Marduk*. Le nom d'Evil-mérodak est rendu dans le Canon de Ptolémée par *Illoaroudamou;* en assyrien, *Illu avarudam* pour *Illu amarudu* = comme *Naadam* = *naadu* dans les inscriptions de Nabuchodonosor.

forme accadienne ou idéographique, lorsqu'ils ne sont pas donnés directement par les syllabaires ou par les variantes. Il consiste à substituer aux signes dont se compose l'idéogramme, les différentes valeurs syllabiques ou idéographiques qu'on sait leur appartenir.

Ainsi, lorsqu'on eut découvert l'obélisque dit de Nemrud, on avait de bonnes raisons de croire qu'il était de Salmanasar, quoique le nom du roi y fut écrit *Di-ma-nu-bar* 𒌋𒄿𒈬𒀭𒀭. On découvrit ensuite que le premier signe *di* pouvait se lire aussi *sal* et *salim* et le dernier *ussur*, on eut donc le nom de *Salmanuussur* (Salmaneser) au lieu de *Dimanubar*. Procédant de la même manière avec l'expression 𒌋𒀭, nous trouvons au syllabaire No. 156 d'Assourbanipal, que le premier signe a la valeur syllabique accadienne de *amar* et le sens général de luire, lumière ; en assyrien *buuru*, correspondant aux racines באר, בהר, בור, ברה, ברע, פאר, פהר, des différents idiomes sémitiques. Ce syllabaire est ainsi :

No. 156 𒌋𒄿𒈬𒀭 𒌋𒀭 𒁹𒄿𒈬𒀭 𒁹𒄿𒈬𒀭

amar signe *bu - u - ru.*

Les Assyriens lui ont encore donné la valeur syllabique de *tsur* (de צֹהר lumière).

Nous pouvons donc remplacer ce premier signe, non-seulement par son équivalent générique *buru*, mais encore par une autre forme de ce verbe, par son participe *nibru*, qui est brillant.

Nous savons aussi par la tablette lexicographique 25, II, 61, que *amaru* égale *namaru* (נאור) luire, briller, synonime de *buuru*. En remplaçant *amar* par ce second équivalent, on obtient *namaru*, *namru* et *nimru*.

La valeur ordinaire du second signe 𒀭 est *ud* avec le sens de clair, brillant (הוד), et, par extension celle de jour et de Soleil. Il s'employe aussi en assyrien dans le sens de clair, brillant, et dans la même forme, *ud*, *udû*, *udii*. Il n'est donc pas nécessaire de lui substituer une de ses autres valeurs.

Par ses substitutions nous obtenons, *nibrud*, ou *nimrud*, au lieu de *amarud*.

Nibrud répond à la forme Nebrôdes employée par l'historien juif Flavius Joseph, et

Nimrud répond exactement au Nemrod (נמרד) de la Genèse et il signifie la lumière brillante, le magnifique, splendide, illustre et non le *rebelle* comme l'on crut les Commentateurs de la Bible.

Il est vrai que le signe *ut* s'ajoute fréquemment, dans les textes en langue assyrienne, à un signe idéographique pour en déterminer la véritable prononciation, soit comme complément phonétique. Ainsi le signe *kur*, idéogramme de *nakar*, se révolter suivi, du complément phonétique *ut* se lit *nakrut*, la rébellion, les rebelles. Mais je ne crois pas qu'il y ait lieu d'appliquer cet usage orthographique assyrien à un nom propre accadien.

Mais lors même que nous admettrions la lecture *Nimrut* ou *Nibrut*, qui serait justifiée par l'emploi de *Nebrôthes* dans l'histoire d'Arménie de Moïse de Korène, on n'aurait qu'une variante de plus de la forme Nemrod employée par la Genèse.

Après avoir établi que l'idéogramme *amarud*, pouvait être lu *Nimrud* en assyrien, nous avons à prouver que ce nom est synonime de *Marduk*, en accadien.

Marduk est composé de deux mots ou racines, *mar* et *duk*.

Mar (= *mir*) signifie entr'autre, jeune, beau, brillant, vermeil = *miru* (אור) *immiru* (de נמר) *nibru* (de בוד) *khuru* (חור) *admu* (אדם) *lidu* (להט). (Voyez Inscrip. Cun. W. A., vol. II, pl. 30, l. 29, et suivantes, et pl. 36, l. 47, et suivantes, et *uru*, lumière, pl. 39 II, l 63.)

Duk, (= , , Grande inscrip. d'Assournatsèr-pal, col. II, 41, 51) signifie avoir, posséder; cela est admis par tous les assyriologues.

Marduk, en accadien, signifie donc : possédant la beauté, l'éclat, la splendeur, ou autrement, le beau, le brillant, le splendide, comme *Nimrud* en assyrien.

Ceci est confirmé par les variantes du nom de Nabonid qui est écrit :

𒀭𒈨𒄭𒁹𒀝 = *an ak-mir-duk* (ou *mur-duk*), Accad. et 𒀭𒀀𒀀𒄭𒀀𒀀𒀭𒀀𒄭𒀀 = *Nabium-nahid*, Assy., et où *Mirduk* s'échange avec *nahid*, éminent, brillant, splendide (arab. נהר).

Voyez Dictionnaire de Norris, pp. 466 et 961.

Dans les tablettes astronomiques ou plutôt astrologiques trouvées à Ninive, il est souvent fait mention de l'étoile de *Marduk*, soit de *Nimrud* 𒀭𒈨𒄭𒁹.

Les assyriologues modernes l'ont identifié avec la planète de Jupiter. Le nom de *Nimrud* ou *Marduk le brillant*, donné à cet astre par les astronomes assyriens, justifie l'identification des assyriologues et en même temps la justesse de mon interprétation. Chacun sait que Jupiter est la plus brillante des planètes.

L'identification de Nemrod et de Mérodach étant justifiée par l'analyse étymologique de ces noms, et l'identité de leur signification, il reste à examiner, comme contrôle, si les qualifications données à Mérodach dans les textes cunéiformes, répondent à celles que la Genèse attribue à Nemrod.

La Genèse (ch. x, 8, 9, 10) dit :

" Et Cus engendra Nemrod qui commença à être puissant " sur la terre.

" Il fut un fort chasseur devant Jehova. De là est venu " le dicton : comme Nemrod, le fort chasseur devant Jehova.

" Et le commencement de son règne fut Babel, Erek, " Accad et Calné."

Dans les textes étudiés et cités par M. F. Lenormant, Les sciences occultes chez les Chaldéens, *Silik-moulou-khi* (?) 𒀭𒄭𒁹𒀀𒀀𒀀𒀭𒀀𒀀𒀀

La tablette 56 II, 38, dit que ce Seigneur de *Ki-ga-ge*, père de *Marduk*, a six fils, comme Cus le père de Nemrod.

Mérodac est souvent qualifié de *riminu*, le vainqueur (héb. רון) dans les inscriptions de Nabuchodonozor, ainsi que dans la tablette 54 II, 53, qui l'appelle aussi *iśru*, le prince, l'éminent, le lutteur (de שׂרא d'où Iśra-el, luttant avec Dieu).

Dans son étude, Les sciences occultes chez les Chaldéens, M. Lenormant cite[1] un passage des textes magiques qui appelle Mérodach : "Je suis celui qui marche devant *Ea*—je suis le guerrier, le fils aîné de *Ea*, son messager." (W.A.I. IV, pl. 30, l. 3.

Ce passage serait identique à celui de la Genèse, "*le fort chasseur devant Jehovah (Ja)*", *si les mots* "*marchant*" et "*messager*" (plus exactement *courrier*, en assyrien : *Tur-sipri*= *rakbu*) ne remplaçaient le fameux *chasseur* qui a donné lieu à tant d'explications embarassées et à des versions si différentes.

Les Septante ont traduit	גִּבֹּר.צַיִד	par géant chasseur.
La Vulgate	„	par fort chasseur.
La version syriaque	„	par géant guerrier.
La version arabe	„	par géant terrible.
La version chaldaïque	„	par homme fort.

L'historien Joseph, qui n'a fait que copier et commenter la Bible, dans ses Antiquités judaïques, appelle Nemrod violent et audacieux ; mais l'expression si caractéristique de *chasseur* ne se trouve pas dans son livre.

La Genèse ajoute que, *fort chasseur devant le Seigneur, comme Nemrod*, est devenu une locution proverbiale. Cependant cette locution ne se rencontre pas ailleurs dans l'Ancien Testament ; tandis que celle de *marchant devant le Seigneur* y est fréquente, ainsi que dans les inscriptions assyriennes. En présence de ces divergences, il est permis de se demander si une erreur n'existerait pas dans le texte hébreu actuel ou si גבר ציד ne pourrait pas signifier autre chose qu'un grand chasseur, ou un homme fort à la chasse.

[1] Les sciences occultes chez les Chaldéens, Correspondant, 25 Novembre, 1873, page 724.

Mais en admettant même l'exactitude de cette version, il existe encore assez d'analogie entre l'idée d'un *Guerrier marchant devant Ea* et d'un *Grand chasseur devant Jehovah*, entre un *chasseur* et un *courrier à cheval* (רכב), pour que ces deux qualifications aient pu être appliquées au même individu par les traditions chaldéennes et hébraïques. Le parallélisme des deux passages cités n'en est pas moins frappant.

La Bible dit ensuite, que Nemrod commença à régner à Babylone et dans trois autres villes ou territoires de la Chaldée. Elle dit également qu'Assur partit de là et qu'il fonda Ninive. Aussi le prophète Michée, v, 6, appelle la Babylonie, la terre de Nemrod, ארץ נמרד, et l'Assyrie, la terre d'Assur, ארץ אשור.

La distinction entre les dieux Assur et Mérodach, l'un comme dieu spécial des Assyriens et l'autre comme dieu de Babylone et de la Chaldée, est aussi clairement établie par les inscriptions cunéiformes.

Sur une tablette mythologique 59 II, 47, on lit :

(Dieu ou roi) de *Babylone* | *Mérodach.*

Comme nous l'avons dit (p. 137), le nom de Mérodach apparaît, pour la première fois, dans les textes du roi chaldéen, Hammourabi, et dans leurs inscriptions, les autres rois de Babylone, invoquent toujours Mérodach comme leur maître, la divinité suprême, le roi du ciel et de la terre ; mais ils ne parlent pas d'*Assur*.

Les monarques d'Assyrie, au contraire, reconnaissent *Assur* pour le premier de leurs dieux ; son idéogramme entre dans la composition de leurs noms royaux ; mais ce n'est que depuis Assour-natsir-pal (neuf siècles avant notre ère), que l'on trouve le nom de Mérodach dans leurs invocations où il occuppe toujours un rang inférieur à celui d'Assur.

Il y a donc accord parfait entre la Bible et les inscriptions cunéiformes sur l'individualité et les traits généraux d'Assur et de Nemrod d'un côté, d'Assur et de Mérodach de l'autre.

Cette distinction est en opposition formelle avec l'opinion des Commentateurs qui, per suite d'une fausse interprétation

du mot *assur*, dans le texte hébreu, ont cru que Nemrod était aussi le fondateur de Ninive et de l'empire d'Assyrie.

Il serait possible d'entrer dans le plus longs développements sur le sens des autres idéogrammes du nom de *Marduk* (p. 137), ainsi que sur ses attributions et ses qualifications dans les textes cunéiformes.[1] Mais il me semble que les considérations qui précèdent sont plus que suffisantes pour justifier ma thèse, à savoir : que Mérodach n'était autre que le fameux Nemrod mis au rang des dieux par les Chaldéens et les Assyriens, et qu'ainsi le nom de Nemrod, bien loin d'être inconnu dans les textes cunéiformes, s'y rencontre presque à toutes les pages.

JOS. GRIVEL.

Fribourg, le 15 *Décembre*, 1873.

[1] Comparez ces qualifications avec celles de *Ahouramazda* dans le Manuel d'histoire ancienne de Lenormant, 2de édit. vol. II, p. 311, 312.

THE ASTRONOMY AND ASTROLOGY

OF THE

BABYLONIANS,

WITH TRANSLATIONS OF THE TABLETS RELATING TO THESE SUBJECTS.

By Rev. A. H. Sayce, M.A.

Read February 3rd, 1874.

The claim of Babylonia to be considered the birthplace of astronomy is so generally admitted that popular works on the science begin with a description of the advantages enjoyed by the ancient Chaldæans for studying the heavens, owing to the level nature of their country and the clearness of its atmosphere. Classical writers for the most part confirm the belief. Diodorus, it is true, mentions the pretentions of the Rhodians, when governed by their solar hero, Aktis, "the sunbeam," the son of Helios, to have been the first astronomers (V, 57); and the Phœnicians sometimes asserted as much for themselves (Pliny, N.H. V, 12; VII, 57; Dionys. Perieg. 907–9); while Macrobius (Comm. in Somn. Scip. I, 21, § 9), S. Clemens Alexandrinus (Strom. I, 16, § 74), Lactantius (Div. Inst. II, 13), Diogenes Laertius (Prooem. § 11), and Lucian (de Astrolog. 3–9), ascribe the origin of the science to the Egyptians. Diodorus tells us (I, 28, 29) that the latter people declared that they had taught astronomy to the Babylonians, in fact that Belus and his subjects were an Egyptian colony. Similarly, Pliny (N. H. VII, 56), Manilius (I, 40–45), and Akhilles Tatius (Isag. I, p. 73, ed. Petav.), share the

honour of the discovery between the inhabitants of the Euphrates and the Nile; and Isidorus (Orig. III, 24, 1) attributes astronomy to the Egyptians and astrology to the Chaldæans. The general voice of antiquity, however, makes the Babylonians the earliest observers of the stars; the author of the Epinomis (9, p. 987), Cicero (de Div. I, 1), and Proklus (in Tim. 277D), all assert this; and Josephus, quoting from Berosus (Ant. Jud. I, 8, 2), declares that Egypt received its astronomy from the Chaldæans. With this agrees the length of time during which astronomical observations are said to have been carried on; for 720,000 years according to Epigenes (ap. Plin. N.H. VII, 57), for 490,000 years according to Berosus and Kritodemus (ib.), for 470,000 years according to Cicero (de Div. I, 19), for 270,000 years according to Hipparkhus (ap. Protel. in Tim. 31C), for 473,000 years before Alexander's invasion, according to Diodorus (II, 31). These writers state that the observations had been recorded in writing upon burnt bricks, a statement confirmed by modern discovery; and the decipherment of the inscriptions has so thoroughly vindicated the trustworthiness of Berosus, that we are inclined to credit the accuracy of the number of years given by him, corroborated as it is by other authors, as well as by the assertion of Cicero (de Div. II, 46), that the Babylonian system of astrological divination upon the births of children was verified by an experience of 470,000 years. Simplicius (ad Arist. de Cælo, 475B) indeed reports the portentous number of 1,440,000 years, although he says elsewhere (ib. 503A), on the authority of Porphyry, that Kallisthenes sent Aristotle from Babylon a series of astronomical observations, which reached back for 31,000 years, or, as the Latin translation has it, for 1,903 years before the time of Alexander the Great. On the whole, we may look upon Berosus as accurately relating the belief of his countrymen upon the matter; and though it is impossible to accept the prodigious antiquity which he assigns to their star-gazing, I have yet been much impressed by the great age to which the testimony of the astronomical tablets I have examined would throw back the beginning of a systematised and recorded astrology among the Babylonians. Thus, the event which followed each eclipse

of the Sun or Moon, such as the death of the king of Elam, or a victory of the king of Accad, was noted down under the supposition that any other eclipse which took place at the same time in the future would be accompanied by a similar occurrence. Now, the great astrological work which was drawn up for the Library of Sargon, of Agane, in the 16th century B.C., contains a list of eclipses for every possible day throughout the year; and as each of these has some event attached to it, thus guaranteeing its reality, we may easily imagine to what an antiquity the records go back. It is probable that the work in question was used by Berosus; we are told by Josephus (cont. Ap. I, 19) that he wrote on Chaldæan astronomy and philosophy; and Seneca (Nat. Quæst. III, 29) calls him the translator of Belus, who is named "the inventor of sidereal science" by Pliny (N.H. VI, 26) and Solinus (56, 3). As we may now safely consider Berosus to represent the views of Babylonian astronomy, the fragments of his book that have been preserved become extremely interesting. These are but few, the chief being those about the Moon, which have been quoted from him by Vitruvius (IX, 2) and others. That body was described as a sphere, half of which is igneous, the light not being derived from the Sun; its movements were said to be threefold, though irregular, one in longitude, one in latitude, and one in an orbit; and its phases to be produced by the alternate conversion of the luminous and the opaque sides to the Earth, these conversions always coinciding with the Moon's conjunction with the Sun; and a lunar eclipse happening when the dark part is turned towards the Earth. Pliny tells us that Berosus fixed the limit of human life at 116 years, on astrological grounds (N. H. VII, 50), and Seneca informs us (Nat. Quæst. III, 29) that he had stated that the world would be submerged by a deluge when all the planets met in the sign of Cancer, and destroyed by a conflagration when they all met in the sign of Capricorn. This implies a belief in a great cosmical year. I think there can be but little doubt that the valuable information given by Diodorus (II, 30) on Babylonian astronomy also came from Berosus. We shall see that it is fully confirmed by the cuneiform tablets. The

Greek writer states that the five planets, Saturn, Mars, Venus, Mercury and Jupiter, were called by the Chaldæans "interpreters" (ἑρμηνεῖς). "They portend," he says, "certain events by their rising or their setting, and again by their colours; sometimes they foretell the amount of wind or of rain or of heat that is impending. Also the appearance of comets, eclipses of the sun and moon, earthquakes, and in fact every kind of change occasioned by the atmosphere, whether good or bad, both to nations and to kings and private individuals." Thirty stars, called "the counsellor gods," were ranged under the planets, 15 above and 15 below the Earth, one of which went every ten days from the upper to the lower. Besides these there were 12 chiefs of the gods, one for each month and for each sign of the Zodiac.[1] Through these pass the Sun and Moon and Planets. With the Zodiac were also associated 24 stars, named "judges," 12 being north and 12 south.

There is little else to be obtained from the classical authors respecting the subject of this paper. Birth portents were a special study of the Babylonians, and each person had a particular star—only not a fixed star, unless it formed one of the Zodiacal signs—assigned to him at his birth. Some of these, Saturn for instance, was sinister. The birthday of the World was supposed to have been when Aries was on the meridian, the creation of the Moon being coincident with Cancer, of the Sun with Leo, of Mercury with Virgo, of Venus with Libra, of Mars with Scorpio, of Jupiter with Sagittarius, and of Saturn with Capricorn (Macrob. in Somn. Scip. I, 21, 24). The planet Saturn was sometimes designated

[1] We find from the inscriptions that the deities to whom the months were dedicated were the following:—(1) Nisan to Anu and Bel; (2) Iyyar to Hea, "lord of mankind"; (3) Sivan, to Sin, the Moon-god, "the eldest son of Bel"; (4) Tammuz to Adar, "the warrior"; (5) Ab to Allat, "the mistress of the spear"; (6) Elul to Istar; (7) Tisri to the Sun-god, "the warrior of the universe"; (8) Marchesvan to Merodach, "ruler of the gods"; (9) Chisleu to Nergal, "the great hero"; (10) Tebet to Pap-sukul, "the messenger of Anu and Istar"; (11) Sebat to Rimmon, "the chief of heaven and earth"; and (12) Adar to the seven great gods. Ve-Adar was assigned by the Assyrians to their national god Assur in order to complete the scheme. Apparently it was without a patron divinity in the Accadian Calendar.

the Sun (Simplic. ad Aristot. p. 499); and the names given to the constellations by the Chaldæans differed from the Greek according to Akhilles Tatius (39), who also says that the substitution of Libra for the Claw of the Scorpion was imported from Egypt. Alexander Polyhistor avers that Pythagoras was instructed at Babylon by Nazaratus; and however much the Samian sage and his travels may belong to the domain of myth, the name of his teacher is correct enough. This is also the case with the Chaldeans, Kidenas, Naburianus, and Sudinas, who, according to Strabo (XVI, 1, 6), were held by the Greeks to have been eminent in science. The sun-dial, Herodotus assures us (II, 109), together with the division of the day into 12 parts,—*casbumi*, or *asli*, as we now find them to have been called,—was the invention of the Babylonians; and the dial of Ahaz seems to have been the fruit of intercourse between Judah and Assyria. Geminus (15) ascribes the discovery that eclipses of the Moon recur after 223 lunations, or 18 years, to the dwellers upon the Euphrates; and Ptolemy mentions that a continuous series of observations of lunar eclipses was in existence in his time up to the era of Nabonassar, B.C. 747 (Magn. Synt. III, 6), referring elsewhere to the five earliest Babylonian eclipses known to Hipparkhus, of 721, 720, 621 and 523 B.C. The inference drawn from Ptolemy's words by Sir G. C. Lewis (Astron. of Ancients, p. 288), that the series of recorded eclipses did not ascend beyond B.C. 747, is overthrown by the single fact that the official archives of the Assyrians note the solar eclipse of the 15th of June, B.C. 763.

The general result of the statements we have been reviewing is to bring out the belief of Greek and Roman writers in the great antiquity of Babylonian astronomy. Whether it were older than the less developed science of the Egyptians, it is impossible to say. We need not suppose that the one people borrowed it from the other; indeed, wherever a calendar has to be constructed, a native independent astronomy will take its rise.

It is hardly necessary to refer to what the Old Testament has to say upon the subject. In Isaiah xlvii, 13, the prophet says to Babylon, "Thou art wearied with the multitude of

thy astrological consultations: let now the dividers of the heavens, the star-gazers, the monthly prognosticators stand up": and the Book of Daniel abounds with references to the astrologers and magicians. Perhaps the comparison of the king of Babylon to the morning star in Isaiah xiv was suggested by the same fact.

It is now time to see what light may be thrown upon the matter by the numerous tablets relating to Babylonian astronomy and astrology which have been brought to the British Museum. Their interpretation is for the most part difficult, since not only are the terms obscure and removed from those of ordinary life, but a large portion of the tablets is written ideographically. The astrological information they contain had to be concealed from the uninitiated, and accordingly, while the grammar is Semitic, the words are in great measure Accadian. Sometimes, however, these are Assyrian; and the mixture of the two vocabularies considerably increases the difficulty of decipherment, as it is often uncertain whether the characters are to be read phonetically or not. Moreover, the same ideograph is not unfrequently used in totally different senses; in fact we may say that, whereas an ordinary Assyrian inscription endeavours to make itself intelligible to the reader, these astrological legends are intended to conceal their meaning as much as possible. So far as I know, the only attempt to interpret these tablets is Dr. Oppert's admirable paper on the Astrological and Portent Tablets, an abstract of which, by M. Mohl, is published in the Journal Asiatique, 1871, vol. 18, p. 67. Dr. Oppert's acuteness and learning cannot be too highly spoken of; the translations he has given, and the identifications of stars that he has made, have opened the way to other students in this department of research. I shall have frequently to refer to his discoveries in the course of this monograph.

The standard astrological work of the Babylonians and Assyrians was one consisting of 70 tablets, drawn up for the Library of Sargon, king of Agane, in the 16th century B.C. There were many editions of it, which varied in small details, as may be seen from the notes I have attached to my translation of a portion of the work in the Appendix. The whole

series was called *Namar-Bili*, or *Enu-Bili*, the "illumination" or "eye of Bel"; and when we remember that Berosus is called the interpreter of Bel, "the inventor of sidereal science," there can, I think, be little doubt that we have fragments before us of the very work that the Chaldean historian turned into Greek. This work, however, was but one out of many on kindred subjects which were possessed by the royal libraries of Babylonia. A list of these, partly mutilated and partly undecipherable, is given in W.A.I. III, 52, 3, the Colophon of which states that it had "been written and engraved by the hands of Nebo-car-ziltumu, son of Munammih, the man of Lasanan, the great country." So far as I can make them out, the different matters treated of are catalogued thus: "(1) The following [are] the omens of evil, and the contrary signs [of good]; tokens of rejoicing and of sorrow to the heart of men. (2) As follows: the eldest born of silver, the interpreter of rain." I am not sure as to what is meant by "the eldest born" or "chief of silver." It may be a sort of meteorological instrument; but more probably it denotes the Moon. The heaven to which the Assyrians looked forward is described as "the land of the silver sky" in W.A.I. III, 66, 19; and Censorinus (18) says that the Chaldæans expected the same weather to occur in cycles of 12 solar years, as well as good crops, famines and pestilences, which were thus made to depend upon the Moon (see Pliny, N. H. XVIII, 79). The second work noted in the Catalogue is upon "the observatory of this city." The Observatory, elsewhere called *Bit tamarti*, "the House of Observation" (W.A.I. III, 61, 6, 15), is here named *śig-gar-ra* (𒋛𒌋𒄿𒄿𒋛𒌋𒄿𒄿𒋛𒌋𒄿𒄿) from סגר "to enclose." The word might be applied to "a storehouse"; but in the feminine form, *śigguratu* (*zigguratu* in Babylonian), it is specially used of the lofty "towers" attached to the temples, on the top of which was the altar of the deity. The Accadai, or "Highlanders," who had founded their creed in the mountains of Elam, believed that the gods only came down to the highest parts of the earth, and therefore raised artificial eminences, like the Tower of Babel, for their worship in the plains of

Babylonia. The gods were supposed to have their seat on the "Mountain of the East." the "Mountain of the World," like the Greek Olympus, or the Hindu Meru (see Isa. xiv, 13); and in the account of the Deluge, Sisuthrus is made to build his altar, after leaving his ark, on the *śiggurat sadi*, or "peak of the mountain." These towers would have been admirably adapted for observing the heavens, and their sacred character would have harmonised with the astro-theology of Chaldæa. The third work in the Catalogue treated of omens and prophecies derived from "birds of the sky, of the water, and of the earth." Apparently the interpretation was to be taken from the cries, appearance, and flight of the birds, and the soothsayer was to stand on the south. Particular attention was paid to their appearance "in the city and its streams." The next series of tablets also relates to water- and sky-fowl, and to the omens derived from their notes. Something is said about "the reed of a tablet," but I am quite unable to translate the passage. The fourth work describes the omens from burning something in the fire. The title of the fifth may be rendered, "When the appearance of a house grows old for the inhabitant, the appearance is an omen of evil." Then comes, "In the midst of the city clay tablets one sets up." This would seem to allude to the description of a library, and the indication of its position is interesting. The title of the 8th work is, "[In] the good city of the land the hand of the warriors binds together [their] confederates," a title which is extremely obscure; but it was probably the first line of the series of tablets to which it belonged. The 9th work has two headings: "The king of the country in the great strongholds guards silver," and "The king of the country in the great strongholds causes silver to be treasured up" (*śar mati ina ma-kha-zi rabi caśpa yuts-tsar* ☆ *caśpa yu-sar-śi*). Next we have "The hen, the screaming [consort] of the land-bird, over the city and its canals one saw and heard," where omens, from the appearance and voice of hen-birds, are referred to. The following line is rendered obscure by the mutilation of the tablet; but it speaks of "casting arrows (*mitpanat*) in the city and its canals away from the earth." What is left of the 12th title relates to dreams. I would

doubtfully translate: "A dream of bright light [results] in fire; a dream of bright light [presages] a fire in the city." Then follows something about the association of "a great beast" (*umamu rabu*) "with the bird of heaven"; and after that we have, "14 tablets of the signs of the earth according to their names: their good presage [and] their evil presage: the signs of the heaven along with [the signs] of the earth are [next] registered."

Now begins accordingly a list of the tablets which related to the phænomena of the sky, in the following order: "(1) The god that is fixed (perhaps the Earth) . . . . ; (2) The Sun grows in size, and the star *Gisru* (the strong) by name . . . . ; (3) The planet Dilbat (Venus) in the *sereti* made (a rising); (4) The planet (Mars), of the 7 names, in . . . . ; (5) The balancing of the Moon and [the Sun]; (6) The appearance of the Moon and [the Sun]; (7) [The tablets beginning] From the 1st day to the 5th day the Moon . . . . ; (8) The star which before it has a corona, behind it a tail; (9) The Air-god produces, and his hand with . . . ; (10) The star Icu; (11) The star Dayan-Same (the Pole-star), which in the midst revolves." It is unfortunate that this part of the Catalogue is so mutilated. The same is the case with the following lines, which sum up what has gone before. So far as they can be made out, they run thus: "Tablets [recording] the signs of the heaven, along with the star (comet) which has a corona in front and a tail behind; the appearance of the sky. . . . . The signs which come forth from the earth along with the heaven . . . . sky and earth . . . . stars . . . ." The seven next lines are too fragmentary to afford any information. They begin with the words, "The sign which in heaven is seen," mention various omens, and end with a notice of "the star which has a corona before it." This of course, with its tail, must be a comet; and it is much to be desired that the tablets which recorded the appearance of these heavenly bodies may yet be discovered. It will be noticed that there were but eleven works bearing on the omens drawn from celestial phænomena, whereas the terrestrial had fourteen devoted to them.

The *reverse* of the Catalogue is somewhat mutilated at

the commencement, but its contents are worth reproducing in full:—

1. [ ]
Istu libitti suati ilammid-ma alu sarri
From this omen one learns the following: the city of the king

. . .
u nisi -su ina kat naciri ibasu pagri u (khusakhkhu
and his men in the hand of the foe are; corpses [and famine]

2. . . . .
. . . . ina dibbi - ca mi - nam ta - gab - bi
. . . . *on thy tablet the number (which) thou statest*

. . . . . .
i -gab- bu - ca - va ci - i . . . . . .
he shall state to thee and with . . . . . .

3.
pukhkhur 25 dip - pi i - da sam-u irtsi - tiv
A collection of 25 tablets of the signs of heaven and earth,

. . . . .
sa dunki - su - nu u limutti - su - nu . . . . .
according to their good presage and their bad [presage . . . . .]

4.
libitti ma - la ina same ib - su - u ina
The omens as many as in heaven are, and on

. . . . . .
irtsi - tiv izzacaru . . . . . .
earth are recorded . . . . . .

5. . . . . .
An - nu-u . . . . . siptu . . . . .
This [is] the record . . . . .

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6. 12 arakhi sa sanat I VI sus yumi sa
Twelve months to each year, (6 × 60 =) 360 *days, in*

mi - na - at izzacaru ina kat . . . . .
order are recorded by the hand . . . . .

7. bi - ib - li urru - ni ins - e sa
during the middle of the day a deficiency of the

ta - mar - ti cacab yānu . . . . . .
sight of the non-existent star . . . . . .

8. mit - khar - ti ris sanat sa cacab Dil - gan
the appearance at the beginning of the year of the star Icu,

ta - mar - ti D.P. Sin u D.P. Samas sa ina . . .
the sight of the Moon and the Sun which in . . .

9. ni - ip - kha u tamirti sa D.P. Sin ar - khi
The rising and appearances of the Moon during the month

yu - pakad . . . . . .
one observes; . . . . . .

10. sit - kul - ta sa cacabi u D.P. Sin
The balancing of the stars and the Moon

inatstsar-ma gub - bu - ul . . . . . .
one watches; and the opposition . . . . . .

11. sa sanat arkhi - sa sa arkhi yumi -su sibru-va
of the year its months, of the months their days the announcement;

sal - mu - u te - pu - su . . . . . .
and of peace the making . . . . . .

12. e - nu - va ina tamirti D.P. Sin yu-mu ir - bu
Then [follows] at the appearance of the Moon, during the day

ibassi ca - li - ti . . . . . .
rain falls; all . . . . . .

13. e - nu-va ina bi - ib - li yu-mu ir - bu
Next: during the middle of the day rain

ibassi ca - li - ti ic - su . . . . .
falls; all . . . . . .

14. ana la - taq bi - ib - li u na - an - mur - ti
for the {*section* / *discernment*} *of the centre (of the heavens)*[1] *and the observation*

pulugti matsarti
of the divisions of the watches

15. va sa - at - tuv (khi - bi) . . . . .
and of the year [the rest is wanting]

[1] Or rather, perhaps, "The middle of the day," 12 o'clock.

16. 12 arkhi ina idat pi e - rib a - na
The 12 months at the time of beginning [and] ending, according

la - taq yumi sib - ci .. ..
to the division of the day generally .....

17. sit - kul - ti cacabi u D.P. Sin ina
The balancing of the stars and the Moon according to the

idā pi e - rib
tokens of beginning [and] ending.

18. as - ri mi - ci issabru - va yumi śami
The places of setting are announced; and the dark days.

lu - u baladha sallim - ma
Life [and] peace

19. s - an - na ci - in - va di - ri - sa
during the year establish thou; and its continuance

su - ul - lim .....
perfect .....

Then follows a list of the months, with a "memorandum below" as to which of them are lucky or otherwise for military operations:—

20.	Niśannu	Airu	Śivanu	Dūzu	Abu	Ululu	Tasritu	Arakh-samna
21.	*lucky*	*not [lucky]*	*lucky*	*lucky*	*unlucky*	*lucky*	.... ..	*lucky*
22.	*unlucky*	*lucky*	*unlucky*	*unlucky*	*unlucky*	*lucky*	*lucky*	*lucky*
23.	*lucky*	*unlucky*	..	..	..	..	*lucky*	..
24.	..	..	..	..	..	..	..	..
25.	..	..	..	..	..	..	..	..

26.	matsartu bararitu *the first watch*	matsartu gablu *the middle watch*
27.	la *un(lucky)*	dunku *lucky*
28.	dunku *lucky*	la dunku *unlucky*
29.	.....	.....
30	.....	.....

ilivu	Dhabitu	Sabad-hu	Addaru	Ziccur ana ci - ti -su *memorandum below this:*
cky	*lucky*	*lucky*	*unlucky*	e - rib tsabi ana carasi *descent of soldier to the camp*
ucky	*unlucky*	*unlucky*	*lucky*	tsabu ana takhazi ina alu matati nacri *the soldier [goes] to battle in the city [and] countries of the foe*
.	*lucky*	..	..	alu car - ra *the city [and] citadel*
.	..	..	..	u ma - da car - ra dunku *and fortified land [are] fortunate*
.	..	..	..	ina idat pi e - rib *at the time of beginning [and] ending*

atsarti sad 'urri
the morning watch

la dunku
unlucky

dunku
lucky

. . . . . .

. . , ...

ma - tsar - ti kal mu - si
a watch [lasting] all night.

tsabu durge - su su - ruv
[if] the soldier his journey takes.

tsabu ala ca - sa - du
[if] the soldier the city attacks.

ca - lat alu dunku - su tsabu . .
All the city [is] prosperous; the soldier also.

yu - mu mit-kha-ru - tu dunku nabu
The day [for] force prosperous is proclaimed(?).

After this comes the Colophon, which I have translated above. The inscription is at once curious and valuable; not the least so, perhaps, the instruction which is given in line 2 about reference to the Library on the part of the reader or scribe. Lines 12 and 13 give the first words of the series of tablets which they catalogue, and which were arranged next to one another on the shelves. The latter part of line 15 was obliterated on the tablet from which our present one was copied; and accordingly the fact is noted, as is often the case in these inscriptions.

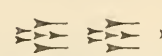
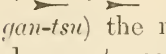
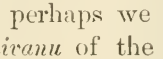
The most important portion of the register is the account which it gives us of the Accadian year. This contained 360 days and 12 months, each of which is noted as being lucky or unlucky for commencing a campaign, attacking a city, and expecting prosperity for a fortified country and city. The names of the months, in Accadian and Assyrian, are to be found on other tablets, together with the intercalary Ve-Adar of the Jews, which was needed with a year of only 360 days. The quotation I have made above from Censorinus would seem to show that the Babylonian Cycle was one of 12 years. Reckoning the solar year at 365 days, 60 intercalary days, or two Ve-Adars, would be required during this cycle. Consequently a Ve-Adar would be inserted in the Calendar every sixth year. But it would be found that a year of 365 days only was too short by nearly a quarter of a day, and that the Calendar at the end of every sixth year would differ from the true year by about a day and 11 hours. In 124 years the deficiency would amount to a whole month of 30 days, so that another intercalary month besides Ve-Adar would be needed. Accordingly we find the Accadians making use of a second Nisan, as well as of a second Elul; but it is difficult to say whether these were full months of 30 days each, or whether they were not intercalated whenever the priestly directors of the Calendar discovered that the disagreement between it and the true year had become a serious matter. A tablet in W.A.I. 56, 5, gives us all the three intercalary months ever known in the Babylonian reckoning of time, together with the events which had happened in each, and might, therefore, be expected to occur again. The ideographs

by which these are expressed are unfortunately obscure, and I can read with certainty only one or two of them. Thus we are told, "In the month Elul, the god makes the king prosperous," and then follows a notice of what will take place "in the second Elul." After this is added the statement that, "Thus from the 1st day of Nisan to the 30th day of Ve-Adar, head and tail completely, so-and-so lives . . . . . head and tail to head and tail completely, so-and-so goes to destruction." In this tablet the full name of the Accadian Ve-Adar is given, as Dir-se, *se* (𒋗𒄀) being Adar. It is called *âr-khu ma-ak-ru sa Ad-da-ri* in Assyrian, which Mr. Norris is doubtless right in rendering, "the incidental month of Adar," comparing the Hebrew מקרה, "chance." *Addaru* seems to be of Accadian origin. *Dir* (𒁹𒌋𒌋𒌋) which distinguishes the name of the intercalary month, signifies in Accadian "purple," "dark blue," or "blue." A syllabary (W.A.I. II, 1, 177, 178) renders 𒁹𒌋𒌋𒌋 by *di-ri* and *śa-a* in Accadian and *ad-ru* and *śa-a-mu* in Assyrian. It is evident that the Assyrian words are borrowed from the old language of Babylonia. Now *śa-a-mu*, or *śi-a-mu* as it is also spelled (W.A.I. III, 59, 8, 1), is the Heb. שהם, "the dark blue" stone, and is common enough in the inscriptions. In a list of colors in W.A.I. II, 26, 44, et seq., we find besides *śa-a-mu*, *śamtuv* and *śa-ma-nu;* and the ideograph is repeatedly used in the astronomical tablets in combination with 𒀭𒁹 "atmosphere," and 𒌋𒌋 "water," to signify "cloud" and "mist" ("blue water") respectively. *Adru* or *a-da-ru* has the sense of "dark" in Assyrian; thus in W.A.I. II, 48, 30, we have after *a-ta-lu-u* "an eclipse," *a-da-ru sa sin* "darkness of the moon," given as equivalent to *an-ta-lu*, the uncontracted form of *a-ta-lu* (from נטל). The month Adar would, therefore, denote "the dark" month of mists; and we thus obtain not only an explanation of the Assyrian name of the last month of the year, but also an indication that the intercalary month belonged to the Accadian Calendar before the latter was borrowed by their Semitic neighbours. Now a slight inspection of the Calendar will show that the Accadian months derived their names from the signs of the Zodiac. The first month, called *Ni-śa-an-nu* (𒀀𒋗𒋗𒋗 𒀀𒋗𒋗𒋗 𒀀𒁺𒀀𒈬), Nisan, in

Assyrian, was [illegible] in Accadian. The last two characters are added as the explanatory complement of the first, which ordinarily stands by itself as the representative of the month;[1] and [illegible], in Accadian *bar*, is the Assyrian *paracu* and *basamu* "altar" or "sacrifice" and "incense." We are taken back to a time when the ram was the chief object of sacrifice, as in Gen. xxii, 13, and so can understand how Aries came to be the first sign of the Zodiac in later western astronomy. The second month, *Ai-ru* ([illegible]), or Iyyar, was [illegible] {*khar* / *gut*} *śi-di*, "the prosperous bull," or more usually [illegible], "the bull" alone. This of course answers to Taurus; and it is possible that the Semitic *Ai-ru* (איר) comes from *khar*, one of the Accadian names of the bull. The third month, Sivan, [illegible], *Si-va-nu* or [illegible] *Tsi-i-van* in Assyrian, was the month of "bricks," *mur* ([illegible]) or *mur-ga* ([illegible]), which is also the signification of the Assyrian *Śivanu*. Another name of the month, however, was that of "the Twins" (*kas* [illegible]); and in this we discover Gemini. Sargon calls the month "a royal" one, possibly because it was dedicated to Sin, the Moon-god, from whom the kings of Assyria and Babylonia traced their descent according to the same monarch. The fourth month was *Du-u-zu* ([illegible]) in Assyrian, answering to the Hebrew and Aramaic Tammuz. Tammuz, as we know from Ezek. viii, 14, was another name of Adonis, the Sun-god; and Ibn Wahshiya makes him one of the primæval inhabitants of Chaldæa, whose death at the hands of the king was lamented by all the gods in the great Temple of the Sun. Now Tammuz is plainly

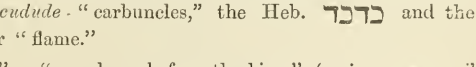
[1] In W.A.I. II, 47, 48, [illegible] (*zig-garra*) is rendered by [illegible] "the god Bel," and [illegible] *summa*, "a sentence," "thus," "if." The latter word is not very explicable, unless it refers to the term in the next line *nameuru* "merchandise." *Zig-gar* would literally signify in Accadian "right-making," and the name of the first month would therefore be that of "the sacrifice of Bel," or "of righteousness." The month was dedicated to Anu and Bel, and Phœnician mythology told of the sacrifice by El of his only son. In II, 35, 55, [illegible] is explained by the Assyrian *asib paracci asirluv*, "the frequenter of the altars" or "sacrifices of uprightness." *Asirluv* is from ישר and must be distinguished from *asurritu* "blessed."

Tam-zi, "the sun of life," or morning, the hero of the Babylonian flood-story whom Berosus calls Sisuthrus. Tam-zi is the husband of Allat or Istar, who had descended into Hades after her first husband, Dū-zi, "the son of life." The character of the latter agrees with that of Adonis; and I think, therefore, that both Dū-zi and Tam-zi are to be regarded as variant forms of the solar hero. But Dū-zi is clearly the prototype of the Assyrian *Dūzu*. The Accadian name of the month means "the seizer of seed" ([cuneiform]), and this would seem to represent Cancer. The fifth month is that "of fire," or "of fire that makes fire" ([cuneiform]), and its Semitic title Abu is possibly derived from one of the values of the Accadian ideograph which may have denoted "fire" in a dialect of that language. The traditional sign of the Zodiac does not answer to the Babylonian name of the month, though the ideas of "fire" and "lion" are perhaps not very remote from one another. Elul, the Assyrian Ululu, was the sixth month, the Accadian *ki gingir-na*, the month of "the errand of Istar or Allat." The Semitic name may possibly have some connection with the name of the goddess, which appears as Alilat in its full form, while the goddess Alala is mentioned in the mythological tablets, The Virgo of the Zodiac is of course Astarte. The seventh month, of the "altar" ([cuneiform]), or more fully of "the holy altar" ([cuneiform]), is the Tasritu of the Semitic Calendar. *Tasritu* or Tisri is a Tiphel form of *esritu* "a sanctuary," the Heb. אשרה; and the sign of the Zodiac which corresponds with the month is of modern origin according to Akhilles Tatius, who states that Libra was originally denominated the Claw of the Scorpion. The following month was called *Arakh-samna*, "the eighth month" in Assyrian, which explains the Jewish *Marchesvan*. Its Accadian name was *apin av-à* ([cuneiform]), the month of "the *prosperous* (?) foundation." It has clearly nothing to do with the Zodiacal Scorpio; but M. Ernest de Bunsen has shown that Scorpio was taken as the starting-point of the primitive calendar; and it is this fact which seems to be referred to. After Marchesvan comes Chisleu, written *Ci-śi-li-vu* and *Cu-śal-lu* in Assyrian.

In Accadian its appellation was  or  (*gan ganna* or *gan gan-tsu*) the month of "many clouds" or "canals." There does not seem to be any connexion between this and the Zodiacal sign Sagittarius. The Aramaic Chisleu, however, appears to be connected with כסיל, "the giant," the Asiatic Orion; and the month in Arabic is *Cānūn*, in which perhaps we may discover the כיון of the Bible, the *Caivanu* of the Assyrian inscriptions. Caivanu was Bel as the planet Saturn, and represented the Accadian Sakus, or "leader." The tenth month is termed *ab-ba uddi* or *abba uddu*, the meaning of which is difficult to determine. *Abba* signifies "father," also "old," and "hollow" (*kabu*), and in the latter sense is joined with *a*, "water," to denote "the sea." *Uddu* meant to "go out" or "rise," and so "sunrise"; while *udda* is "light," and *ud* "day" or "sun." Now in W.A.I. I, IV, 75, *Ud* (for *Uddu*) replaces the ordinary name of the tenth month, which seems to imply that *abba* and *uddu* have much the same signification. At the same time it is difficult to understand how it can have been called a month of light, as the inscriptions show that it was stormy and wet. The Assyrian *Dhabitu* (Tebet) is equally obscure, and nothing can be learned from the Zodiacal Capricornus. The next month, "of want and rain" (), *Sabadhu* (Sebat) in Assyrian, answers naturally to Aquarius. Babylonia is still reduced to an impassable marsh by the rains of January, and it is a noticeable fact, to which Sir H. Rawlinson first drew attention, that the Chaldean account of the Deluge discovered by Mr. G. Smith is the eleventh of a series of twelve tablets. Now, M. Lenormant has pointed out that this series is an old Babylonian Epic, pieced together before the 16th century B.C. out of a number of earlier mythological poems or ballads. The adventures of the solar hero Gisdhubar ("the mass of fire") are the connecting bond of the group of poems, like the siege of Troy in the Iliad or the wanderings of Ulysses in the Odyssey. The selection and arrangement of the originally independent legends which make up this early epic have been determined by astronomical reasons. Each story corresponds to a sign of the Zodiac, and consequently to a

month of the year which agrees with the character of the particular myth. Thus the story of the Flood is grouped under Aquarius and the "rainy" month, while the legend of the descent of Allat or Istar into Hades to seek her lost husband Du-zi "the son of life," the Tammuz or Adonis of Palestine, seems to belong to the sixth month and the sixth Zodiacal sign. Similarly the fourth month appears connected with the tale of the untimely death of this Dūzi or Tammuz, cut off by the boar's tusk of winter; and the conquest of the winged bull by Gisdhubar must be referred to the second tablet. Tammuz, it seems to me, is to be identified with Tam-zi "the sun of life" or "morning sun," the hero of the Deluge, who, like Duzi, was a husband of Istar. In fact the two are but different forms of the same legendary character, whose solar nature is sufficiently determined by the name of Tam-zi's father, Ubara-Tutu or "the glow[1] of sunset." Tutu is but another form of Tu, who is said to be the god of death (in W.A.I. III, 67, 21); and Tutu, like Zeus, is called "the progenitor," the father of gods of men. Out of the primæval chaos of darkness and death, according to the Babylonian view, came life and living things.[2] The fact that the ancient Accadian epic was arranged upon an astronomical principle shows how thoroughly the study of the heavens had penetrated the mind of the people; and we are not surprised, therefore, at finding that sacrifices were offered to the stars,[3] or that the gods were identified with the more prominent heavenly bodies. So far as I can see, the Chaldæan deities were primarily the powers of nature,—the earth, the sun, or the sky. These developed into distinct personalities, and the numerous epithets which were applied to them originated a vast mythology and an endless array of divinities, each epithet becoming a separate personality. As in the case of other nations, the Sun had been the chief object of

[1] *Ubara* is rendered by the Assyrian *cididu* (W.A.I. II, 2, 254), which comes from the root כדה like *cudude* - "carbuncles," the Heb. כדכד and the Heb. כדוד "a spark" or "flame."

[2] Tutu is said to "speak" or "prophesy before the king" (*sa ina pan sarri' nabu*  W.A.I. III, 53, 15.

[3] W.A.I. III, 66, Rev. 13, 17.

worship, and the larger portion of the mythology accordingly grouped itself about the Sun-god and the numberless forms which he had assumed. The more I examine the Accadian mythology, the more solar does its character appear. But there was still another stage of transformation through which the Accadian Pantheon had to pass. Its several personages, mostly forms of the Sun, were identified with the planets and the stars, and so a curious artificial system of worship arose, in which the principal deities bore a double character, on the one side mythological, and on the other stellar. Thus Merodach, whose Accadian name *Amar-ud* or *Amar-utu* "the Circle of the Sun" shows his solar nature, became Mercury as a morning star and Jupiter as an evening planet. A tablet (W.A.I. III, 53, 2) informs us that Merodach is called *Sulpa-uddu* "the messenger of the rising sun" in Nisan: *Ut-ul-tar* "the light of the heavenly spark" in Iyyar; *Dilgan* or *Icū* of Babylon in Sivan; *Dapinu* in Tammuz; *Makru* or *Dir* in Ab: *Sakmisa* in Elul; *Nibiru* in Tisri; *Rabbu* "the mighty" in Marchesvan; *Alam* "the shadow" or "image" in Chisleu; *Sarru* "the king" in Tebet; *Gal* "the great" in Sebat; and *Kha Hea* "the fish of Hea" in Adar. Now the last identification leads us back to the Calendar, and enables us to explain the name of the last month of the year. This is *Se* or *Se kitar* in Accadian, the month "of the sowing of seed," and the connexion of the Zodiacal Pisces with it is plainly due to the title which Merodach, as a star, bears during this month. The double month Adar and Ve-Adar would be the origin of the double Pisces, thus suggesting that the signs of the Zodiac were named at a later date than the months. The star Dilgan, which is translated *I-cu-u* in Assyrian, was peculiarly the star of Babylon, and therefore of its patron god Merodach. The late epoch, however, at which the Accadian Pantheon became astronomical, is shown by the fact that whereas Merodach was the son of Hea and Dav-cina, "the earth" male and female, the star Icu was the son of Anu "the sky."[1] This points to a time when the stars had begun to be worshipped as gods or else had been identified with

[1] He is also called one of the nine servants of Hea (W.A.I. III, 68, 13).

various mythological heroes, but before the elaborate transmutation of the popular religion into a stellar worship. Icu is given first in a list of 12 stars, called the 12 stars of the west; and its rising in the west in March or April is therefore fixed. It was not Mercury, however, but Jupiter; and the identification of Merodach with both these planets is one of the most difficult and intricate parts of Babylonian astrotheology.

It will be necessary before going further to determine the Chaldean names of the 7 planets, among which the Sun and the Moon were always reckoned. This has been the work of M. Oppert, who may claim this part of the subject as peculiarly his own, and I have little to do beyond completing his conclusions. The planets were called by the Accadians the 7 *lubat* or *dibbat*, a word which is translated by the *bibbu* in a list of animals (W.A.I. II, 6, 4). It stands between the wolf (*zību* or *acilu*) and the goat (*atadu*), and perhaps signified the lynx, from the brilliance of its eyes. בבא in later Hebrew meant "the pupil of the eye" (like בבה in the Old Testament), and this was no doubt the reason why the word was set apart to denote the most prominent of the stars. Jupiter, the brighest and reddest of the planets, is specially called *Lubat* (W.A I. II, 49, 44) and *bibbu* (W.A.I. II, 48, 53; 49, 44). The order in which the planets are arranged is always the same: the Moon, the Sun, Mercury, Venus, Saturn, Jupiter, and Mars, the Moon-god taking the lead, as throughout the later Babylonian mythology, in accordance with the feelings of a nation of astronomers to whom the night and its luminary were matters of more consideration than the day. The Moon was called *A-cu* (𒀀𒌋) in Accadian, when spoken of astronomically; and the Sun was designated *Biseba*, a name which is elsewhere translated *tsalamu*, "figure" or "mass." M. Oppert would also identify the Moon with "the star of Anunit," which is said to be "the star of the Tigris" (II, 51, 58), in which case the Sun would be *śinuntu*, "the star of the Euphrates"; but he cannot be right in his ingenious conjecture that the Sun is denoted by the three stars *Bar-tabba-galgal* "the doubly great," *Bar-tabba-dūdū* "the doubly little," and *Bar-tabba sa ina sid cacab*

Sib-zi-anna "the double star which depends on the star Sibzi-anna," since the first-named star is one of those of the west. Moreover, in II, 49, 12, the star Anunit is identified with Istar. In the astronomical tablets the Moon is generally represented by the symbol XXX, derived from the thirty days of the month, just as the two Istars are XV, the half of XXX. The usual name of Mercury was Sulpa-uddu or Sulpa-uddua, "the messenger of the rising sun," as M. Oppert happily renders it. It was more especially the title of the planet during the first month of the year, as we have seen above, and is given as the equivalent of the star Ut-ul-tar in W.A.I. III, and of Dapinu in W.A.I. II, 48, 50, Ut-ultar and Dapinu being further equated in W.A.I. II, 51, 62. M. Oppert translates Dapinu by "ambiens," but considering that the word is used of kings and given as a synonyme of *emamu*, the translation may be questioned. However, *dapanu* certainly means "a wheel." During the month Elul the title of the planet was Sakvisa. This is clearly the Greek Σεχές, which Hesykhius states was the name of Mercury among the Babylonians. From the color of the planet was derived its appellation of "the blue star" (𒀭𒀭𒀭𒀭𒀭𒀭𒀭𒀭𒀭𒀭𒀭𒀭), which is called a *lubat* or planet in W.A.I. II, 49, 9, and is rendered by *macrū*, the name of Mercury in the month Ab, and *mikid isat* "the burning of fire," in II, 49, 31. In W.A.I. III, 67, 28, Sulpa-uddu is called "the prince of the men of Kharran," a very remarkable reference to a city which was closely connected with Accad in race and history from very early times, and whose laws are conjoined by Sargon with those of Assur. the ancient præ-Semitic capital of Assyria. The astronomical lore of the Kharranians is thus taken back to a remote period. Sulpa-uddu is also called "the king of light" and "the king of *gusurra*" or "woodwork," and he is connected with the gods Sulpa-*cisal* (?) and Pa-uddu, who, along with Tu or "death," are given as synonymous with Gubba-ê-makh "the support of the mighty house." It is interesting to see how the Morning-star is associated with the god of death, just as Hermes the Vedic Sârameyas or Dogs of the Dawn is the conductor of souls to Hades. A further title of Mercury is *ris risati* "chief of the beginning," and like

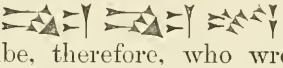
Venus he is called *Nabu* or "proclaimer," as being the precursor of the Sun. Venus is ordinarily entitled Dilbat (𒁹 𒌋), the Assyrian signification of which is stated to be *nabu*, and the word is found in Hesykhius, who says that δελεφάτ was the Babylonian Venus. The planet was of course identified with Istar, and the name of the goddess "as a star" was Nin-śi-anna "Lady of the defences of heaven" (W.A.I. II, 59, 20). Istar and Bilat were much confused together, indeed they were originally but two forms of the same goddess; and we are not surprised, therefore, at being told (W.A.I. III, 53, 36, 37), "Venus, at sunrise is Istar among the gods; Venus at sunset is Bilat among the gods." As Finzi (Antichitá Assira, p. 516) points out, "the Lord of the star" and "the Lady of the star" are each given as a *musedū* or "spirit" (Heb. שֵׁד) of Anu in W.A.I. III, 68, 31, 32. According to II, 49, 12, the star of Anunit is Istar, as well as Dilbat and *Aritur*. A tablet, which I have translated in the Appendix, describes the phases of the planet during the year. Another name of Venus was *mustelil* "the brilliant." The full name of Saturn was Lubat-sakus, which is given as a synonyme of Lulim in W.A.I. II, 48, 52. Now *lulim* signified both "king" and "stag" (W.A.I. II, 6, 8, 31, 41); and *sakus* we are told in W.A.I. II, 32, 25, was the Assyrian *Caivanu*. *Sakus* is composed of two characters, which mean respectively "head" and "man," and accordingly we are informed that it denoted "top of the head" (*saku sa risi*), and "chief" or "first-born" (*asaridu*). It is in the latter sense that Caivanu is used, from the root כון. Caivanu is of course the Heb. כיון (Amos v, 26), the Arabic *Keiwân* or Saturn. The planet was also designated *Sakus Utu* (𒁹 𒀭 𒌋 𒀭 𒀀) "the eldest born of the Sun-god," as well as *Gigi*, explained as "righteousness and justice" (*cittu u misar*), and *Mi* ("the black") or *Cus* "darkness" (*tsalmu* in Assyrian). The dull feeble light of the orb when seen by the naked eye sufficiently accounts for this epithet. A further appellation of Saturn was Zibanna, in Assyrian Zibanitu; and in W.A.I. II, 67, 49, the star *mi Zibanitu* is erroneously given as the equivalent of Jupiter (*Lubat-guttav*). "The Black Spark" (𒀭 𒀭) is said to be Pap-sukul (W.A.I. II, 49, 8).

Papsukul was "the attendant of Anu and Istar," to whom the month Tebet was sacred. His titles were "the lord of bliss," "the lord of the earth," and "the strong," and his wife was "the queen of copper." Perhaps he is but another form of Dū-zi, the son and husband of Istar, of whom I have already spoken; at all events "the Yellow-green Spark" (𒄀𒄀𒄀 𒄀𒄀𒄀) which is identified with Dū-zi, is said to be the same as "the Black Spark" (W.A.I. II, 49. 10, 12).[1] Next to Saturn came Jupiter in the Chaldæan system. Jupiter was properly termed Lubat-Guttav (𒄀𒄀𒄀 𒄀𒄀𒄀 (𒄀𒄀𒄀) 𒄀𒄀𒄀 𒄀𒄀𒄀 or 𒄀𒄀𒄀); but its size and brilliancy caused it to be singled out as pre-eminently the *Lubat* or *Bibbu* or "planet" (so in W.A.I. III, 1, and above). *Guttav* is explained by the Assyrian *pidnu sa same* (W.A.I. II, 47, 21); and M. Oppert acutely interprets this "the furrow of heaven," *i.e.* the ecliptic, to which Jupiter is near. The planet is also called Mustarilu (in W.A.I. II, 47, 21), in which we may recognise the *Moshtarī* of the Arabs. A passage I have already referred to (II, 67, 44, sqq.) makes this star identical with six others, *Gan-gusur* (𒄀𒄀𒄀 𒄀𒄀𒄀) "the light[2] of the hero," "the star of Merodach" (𒄀𒄀𒄀 𒄀𒄀𒄀 𒄀𒄀𒄀), *Dilgan* (𒄀𒄀𒄀), *Kak-śidi* (𒄀𒄀𒄀 𒄀𒄀𒄀), "the creator of prosperity"; *Entenamaslum* (𒄀𒄀𒄀 𒄀𒄀𒄀 𒄀𒄀𒄀 𒄀𒄀𒄀), and *Mi-Zibanitav* (𒄀𒄀𒄀 𒄀𒄀𒄀 𒄀𒄀𒄀 𒄀𒄀𒄀). But this is certainly a mistake. The last star, as we have already seen, was Saturn; the preceding star is translated by the Assyrian *khabatsiranu*, and explained to be 𒄀𒄀𒄀 𒄀𒄀𒄀 𒄀𒄀𒄀 𒄀𒄀𒄀 (*sir etsen-tsiri*, "the Tip of the Tail")[3] (W.A.I. II, 49, 47);

[1] In one place, however, Pap-sukul is called Ugur, the usual name of Nergal. But the two deities are distinguished from each other; thus Chisleu was sacred to Nergal, and Tebet to Pap-sukul.

[2] For the signification of *gan* as "light" (Assyrian *nabadhu*), see W.A.I. II, 48, 36.

[3] The word is written 𒄀𒄀𒄀 𒄀𒄀𒄀 𒄀𒄀𒄀 𒄀𒄀𒄀 in W.A.I. III, 57, 55, where it is stated to be one of the seven *lumasi*. Oppert identifies it with Aldebaran, though he wrongly renders it "the star of tempest." 𒄀𒄀𒄀 𒄀𒄀𒄀 𒄀𒄀𒄀 𒄀𒄀𒄀 is given as a synonyme of the "tail" in II, 44, 17. *Khabatsi-ranu* is elsewhere written *khabatsi* simply, and is probably the same word as *khabatsillu* (Heb. (חבצלת) "the lily," which grows up like a tail.

and *Kak-śidi* is rendered *sucunu*, and is said to be "a star of the west," along with *Dilgan* or *Icu* (W.A.I. II. 49, 48, 3), which is a name of Mercury in the third month. *Dilgan* was the patron star of Babylon according to W.A.I. II, 48, 57, and III, 53, 2, just as *Marbuda* was of Nipur, and this fixes its identity with "the star of Merodach," which is elsewhere (II, 51, 61) called  "the flame of the desert." The scribe, therefore, who wrote the passage in question, must have misunderstood his copy, and have identified with Jupiter a group of stars which were coupled with it in consequence of their proximity to the ecliptic. When the scribe went on to identify this *lubat* with the god Adar, he was doubtless right, and we may also accept the statement that the planet was further entitled "the star of the god Nin-aśu," the star *Ra-di-tar-ta-khu*, and "the star of the Eagle of Zamāmā," another name of Adar (II, 67, 53). The fiery color of Jupiter accords with the character of a deity who was armed with the thunderbolt, and whose name was a synonyme of iron. The Phœnician title of Jupiter, we are told, was *Gad* "good fortune,"[1] to which a reference is made in Isa. lxv, 11, and possibly this גד is derived from *Guttav*, with a change of the dental to assimilate the word to the Semitic *gad*, "luck."

The last planet was Mars, whose names were manifold. Ordinarily it was termed Nibat-anu, the meaning of which is obscure. *Nibat-Bel* was the outer wall of Babylon, as distinguished from *Imgur-Bel*, the inner wall; and *nibat* seems to be the equivalent of the river Datilla, "the lord of the house of death." Perhaps *Nibat-anu* is "the sanctuary of Anu," though the form Anu is Assyrian, not Accadian. However, the star is sometimes called *Nibat* simply. In W.A.I. II, 48, 54, it is rendered by *śimut*, which M. Oppert translates "hostile," and elsewhere (II, 49, 7) it is identified with "the White Star" (*ul ud* or *ul pitsu*). Another name by which it was known was *Nu-mia*, the Assyrian *baluv*, "the star which is not" or "is wanting," referring to the fact that Mars recedes

[1] See Chwolsohn "Die Ssabier," II, p. 226, where quotations from the Talmud are given.

from the Earth until it is almost invisible. The Library of Sargon possessed a special treatise on its phases. It was also entitled "the star of the seven names." These are given as follows:[1] (1) *Ul manma cacab akhu* ("the luminary reigning over the star of the hyæna"), *ul nacaru* ("the hostile"), *ul tsarru* ("the enemy"), *ul khumkhum* ("the sultry"), *ul śaru* ("of the king"), *ul zibu* ("of the wolf"), and *Nibat-anu*. Elsewhere (II, 49, 35) we are told that *Lul-la* (𒀭𒈬𒋗𒆠) or *Lul-a* (𒀭𒈬𒋗𒀀) is to be rendered *śarru* "king" in this case, and is not to be identified with another star which was one of the constellations of the west, and though written in the same way in Accadian denoted some kind of animal. Similarly *khul* (𒄩𒀭𒈬𒆠) is translated (II, 49, 32) by the Assyrian *khumkhum* (𒄩𒄩𒋗𒋗) and 𒀭𒈬𒋗𒋗𒋗 𒁹𒁹 𒀭𒈬𒋗𒋗 by *nacaru* and *sanumma* ("hostile") (II, 49, 36, 37), showing that *nacaru* does not here mean "changeable," while the animal 𒀭𒈬𒆠 𒀝 𒀭𒈬𒋗𒋗 is represented by the Assyrian *akhu* (II, 49, 38) the אחים of Isa. xiii. 21. Other names of Mars were 𒀭𒈬𒋗𒋗𒋗 𒀭𒈬𒋗𒋗 𒄩𒀭, *khabbatu* or "the plunderer" in Assyrian (II, 49, 34), and 𒄩𒀭𒋗𒋗 𒁹𒁹 𒁍 (*gig*), in Assyrian *misallim mutani* "agent of deaths" (II, 49, 40). A fragmentary planisphere places the star *Lul* (𒀭𒈬𒋗𒋗𒋗𒆠 𒀭𒈬𒋗𒋗) in the lower half of one of the eight segments into which it is divided, immediately above seven dots, under which is written, "Bel who goes before the star" (𒆠𒀭𒋗𒋗𒋗𒋗 𒀭𒋗𒋗𒋗 𒋗𒋗𒋗𒋗 𒄩𒀭𒈬𒋗𒋗𒋗𒋗

𒁹𒁹𒁹 𒁹𒁹𒁹𒁹 𒁹𒁹𒁹 or 𒁹𒁹𒁹 𒁹𒁹𒁹𒁹 𒁹𒁹𒁹, which might be read *ticsi*, *ticliv*, or *ticpi*. Seven stars go by this name (II, 49, 10–13; III, 50–52): *Pap-nu* (𒀭𒁹𒁹𒁹𒁹) "the hero of setting," *i.e.*, Saturn according to Oppert; *Śar* (𒀭𒀭𒀭𒀭) "of the king," *i.e.*, Jupiter; *Khuśin* or *Khuśibain* (𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹 or 𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹

Sib-zi-anna with Regulus, *Entemasmur* with Aldebaran, and *Idkhu* with the Southern Balance (Zuban-Edgenubi). The king of the Broken Obelisk says of himself (W.A.I. I, 28, 14), "In the days of variable storms (and) heat, in the days of the rising of *Kak-śidi*, which (is) like bronze, he hunted"; and as this was in the northern part of Nairi, more probably nearer the Euxine than the Caspian, we have a slight basis upon which to attempt an identification of the star.

There was yet another set of seven stars, called *māsu* (𒈬 𒌋𒌋 𒁹) "of the week" (III, 57, 57–61). M. Oppert has given the following ingenious explanation of them. The Sun had three names, *mul Bartabba-galgal* (𒀭 𒄭 𒁹𒁹 𒈬𒁹 𒈬𒁹) "the star doubly great"; *mul Bartabba-dūdū* (𒀭 𒄭 𒁹𒁹 𒈬𒈬 𒈬𒈬) "the star doubly little"; and *mul Bartabba sa ina sid mul sibzi-anna nazuzu* (𒀭 𒄭 𒁹𒁹 𒁺 𒌋 𒁹 𒈬𒈬𒈬𒁹 𒈬𒁹 𒁹𒁹𒁹 𒈬𒁹𒁹𒁹 𒁹𒁹 𒁹𒁹 𒈬𒁹 𒈬𒁹𒁹) "the double star which depends on Regulus"; then come *mul Nin-śar* (𒁹𒁹𒁹𒁹 𒈬𒁹𒁹), "the star of Istar,"[1] or the Moon; *mul an Ner-ra-gal* (𒁹𒁹𒁹𒁹 𒁹𒁹 𒁹𒁹𒁹 𒈬𒁹𒁹 𒈬𒁹) "the star of Nergal" or Mars; *mul an Pa* (𒁹𒁹𒁹𒁹 𒁹𒁹 𒈬) "the star of Nebo" or Mercury; *mul śar* (𒁹𒁹𒁹𒁹 𒈬𒈬𒈬𒈬) "the star of the king" or Jupiter; *mul Mustilil* (𒁹𒁹𒁹𒁹 𒁹𒁹𒁹𒁹𒁹 𒁹𒁹 𒁹𒁹𒁹𒁹 𒁹𒁹𒁹) "the star of brilliance" or Venus; and *mul Zibanna* or Saturn. There are difficulties, however, in the way of part of this explanation. Though the Sun might be called "the star doubly great" it is hard to see how it could be called "the star doubly little." Moreover, the "star doubly great" is one of the "constellations of the west," and "the double star" is mentioned along with *Kak-śidi* and *Utu-ultar* as being in the ascendant in Tammuz (June), while it cannot be said of the Sun that "it is fixed in the proximity of *Sibzi-anna*." There is no reason for supposing that the first day of the Chaldæan week was dedicated to the Sun; Dio Cassius asserts that our week-days came from Egypt, and the Babylonian Sunday might easily have been con-

[1] *Nin-śar* is a name of Istar in W.A.I. II, 54, 19. It signifies "Lady of rising."

secrated to some other god.[1] Nergal was Mars, as we learn from W.A.I. III, 57, 7, where Nibatanu is identified with the god *Gallamta-uddua* (𒀭𒄑𒄑𒄑 𒁹𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹) "he who goes forth in strength." Now *Gallamta-uddua* is a title of *Allamu* or Nergal. "the king of Cutha." and Allamu or Almu is, like *Śarrabu*, another name of *Śar-nerra* (𒀭𒄑𒄑𒄑 𒁹𒁹𒁹 𒁹𒁹𒁹). But it is a remarkable instance of the way in which Babylonian mythology went on developing new deities out of epithets applied to old ones and then forgetting their original identity, that the same passage which tells us that Gallamta-uddua is Nibatanu, also states that Śar-nerra is Guttav or Jupiter. The astral Śar-nerra has thus become confounded with Merodach. The whole of the tablet in question is worth quoting, although the ends of the lines are unfortunately lost (III, 57, 47–52). "Venus in the month Tammuz, the Moon and *Śar-nerra* . . . Gallamta-uddua close to the horn of the star ——. The star of the double ship (𒀭𒄑𒄑𒄑 𒁹𒁹𒁹) also was seen; and the third day they disappeared.[2] Want of corn and barley in the country will result. *Śar-nerra* and *Gallamta-uddua* are Jupiter and Mars."

I may perhaps be allowed to turn aside here and point out that the identification of the stars and the divinities was a gradual process. The ideograph for "god" is an eight-rayed star, showing that star-worship had already been introduced among the Accadians at the time of the invention of writing, and that the most natural symbol of a deity was thought to be a star. The stars themselves were represented as constellations by a group of three stars, and this would imply that not only individual stars, but groups of stars also, had already been named. The names, however, were not those of gods; in most cases they were derived from the appearance of the heavenly bodies themselves, or from different

[1] *Bar-tabba* is explained *ilu cilallan* "the god of all things" in III, 68, 68, where it is apparently a title of Sarrabu or Nergal.

[2] This star belongs to Tebet (December) in III, 53, 25, where it appears along with Venus, just as in Chisleu, the star of Gula or Bahu, in Sebat Dilgan of Babylon (𒀭𒄑𒄑𒄑 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹) and in Adar "the Fish of Hea" are associated with Venus.

objects of nature, so that the stars could hardly as yet have been invested with a divine character. This must have been a later work; and when we find the planets called after the name of an animal up to the most modern times, we may infer how late the work was. Indeed, in instances like that above, where two separate stars are designated by the titles of the same god, which must have become divided into independent deities before such a fact was possible, although their original identity was still remembered in the days of Assur-bani-pal, it is plain that the full development of astro-theology cannot have been much earlier than 2000 B.C.

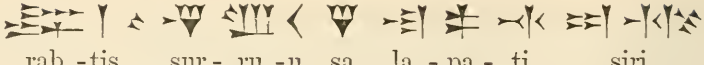
From the planets we pass on to the fixed stars, all of which, so far as they were visible to the naked eye, were named and grouped. According to Diodorus 24 stars were associated with the Zodiac, 12 being north and 12 south. Now the points of the compass in this statement are, I think, given incorrectly. They ought to be east and west. At all events, we find two classes of 12 stars in the tablets, one set of 12 being called "the Stars of Accad" and the other set "Stars of the West." One of the stars of Accad was *Nibiru*, the name of Merodach in the seventh month. The 12 stars of Martu or the West, to which reference has so often been made, were the following: *Dilgan* or *Icu* (Jupiter); *Mus* (Mercury); *Bartabba-galgal; Nin-makh* "the mighty lady"; *Nibatanu* (Mars); *Khuse-makh; Sugi; Kak-śidi; Bir* ("vermilion"); *Sar; Allul;* and *Lula* (II, 49, 3–9). Allul, like Lula, occurs in a fragmentary list of certain stars which describes the occurrences to be expected after the appearance of each, and is a good example of the astrological use to which the observation of the heavens was put. A copy will be found in W.A.I. II, 49, 4, and the following is a translation of this curious document:—

"If the star Khuzaba return, in . . . .
If the star of the Lion, ...
If the star of the Hyæna, *nasbarti* . . . .
If the star of the Stag (*Lula*), *rullati* are in the land.
If the star of the Dog, forces are in the country.
If the star of the Bear, misfortune is in the land.

"If the star *Biazi*, abundance of rain.
If the star of the Fish, justice is in the land.
If the star *Allul*, peace is in the land.
If the star *Tartakhi*, they decree evilly in the land.
If the star of Concealment (𒀭𒀭𒀭 𒁹𒁹) destruction is in the land.
If the star *Cu-khia*, the house is purified.
If the star of Destiny, pestilences are in the country.
If the star *Irbie*, blessing is in the land.
If the star of the Bright Body, strength is in the land.
If the star of the Rising Day, misfortunes are in the land.
If the star *Dilme*, happiness in the land they measure out.
If the star of the stone *Absia*, prodigies are in the country.
If the star of the Stone of the Bronze Fish, *possession* (?) of a good heart: there is *peace* (?).
If the star of Alabaster, blessing is in the land.
If the star of Silver, regular provisions are in the land.
If the star of Gold, obedience is in the land.
If the star of Bronze, forces are in the land.
If the star of the Prophet (?), peace is in the land.
If the star of the Lion of the Sun, forces are in the land.
If the star *Śāsi*, inundation during the month . . . .
If the star *Calmati*, inundation. . . . .
If the star *Uttedummari*, inundation. . . . .
If the star of the Flocks, the house. . . . ."

Less astrological and more astronomical is the following document, which supplies us with the names of several more of the fixed stars :—[1]

1. 𒀭 𒋗𒋗𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹 𒋗𒋗𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹

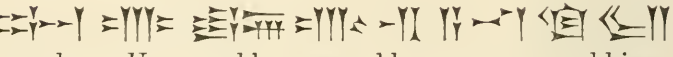
3. 

rab -tis sur- ru -u sa la - pa - ti siri

fully: the foundation of the hinges of a gate

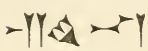
il - lap - pat-va

is begun. And

4. 

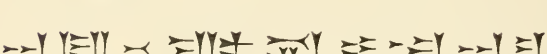
cacab U - rakh - ga -khu a - na makhira

The star Urakh-gabbu portends a fixed



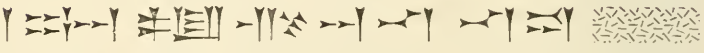
cina

tariff

5. 

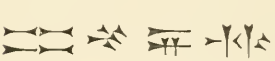
Lu -bat- sak - us i - ba - an -va

Saturn intervenes. and

6. 

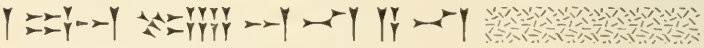
cacab Śib - zi - an - na na - du . . . . .

The star of the Shepherd of the Heavenly Flock (was) clear . . . .



ku -mu ibassi

. . . . . *is*

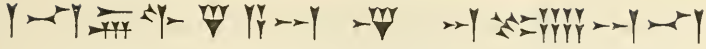
7. 

cacab Tir - an - na a - na . . . . . .

The star of the Life of Heaven for . . . . . .

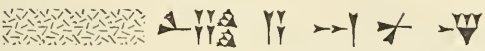
zunnu izannu

rain rains.

8. 

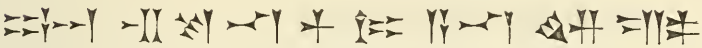
na - śa - pi sa zunni izanninu D.P. Tir - an - na

Increase of rain rains: the star Tir-anna



. . . . . * zunni la izannin

. . . . . *the dropping of rain falls not.*

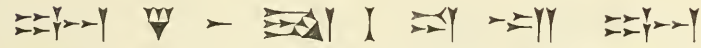
9. 

cacab En - te - na -mas-luv a - na im sak

The star of the Tip of the Tail a great cloud

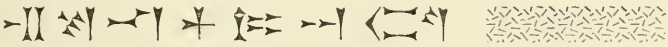
(i) - sak kha - ru - up -tav

brings on; locusts (?)

10. 

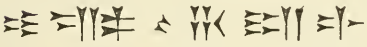
cacab sa ina garni - su nazu - zu cacab

The star which in its horn is fixed, the star



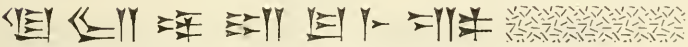
En - te - na -mas-luv D.P. Maruduc . . . . . .

of the Tail-tip, Merodach . . . . . .



i - sak kha - ra - pi

brings on or locusts (?)

11. 

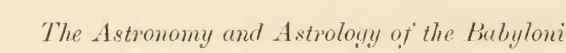
makhira zikhir- ra cu-me sak . . . . . .

a small tariff . . . . . .

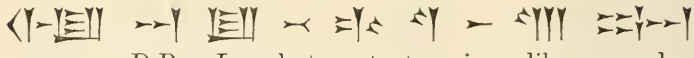
12.

cacab An - ta -sur - ra ana rukha elita

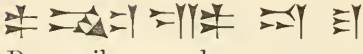
The star of the Upper Sphere portends a violent wind

13. 

D.P. Lu - bat - gut - tav i - ba - an - va
Jupiter intervenes. and

14. 

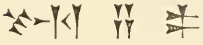
va D.P. Lu - bat - gut - tav ina lib cacab
also Jupiter in the place of the star



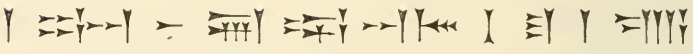
Pa- pil - sak nazuz-va
Papilsak is fixed; and

15.

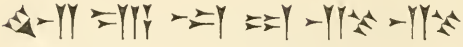
cacab an - ta - sur - ra ma ana śama melav
The star of the Upper Sphere aforesaid fog (and) rain



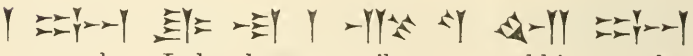
yuts - tsa - pa
causes.

16. 

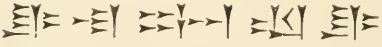
cacab Dil - gan Bab - ili erib-va ana śama
The star Ieu of Babylon sets, and fog



urpāti yutstsapa
(and) mist causes.

17. 

cacab Lul - la ana tib - ut rukhi cacab
The star Lulla foretells a blast of wind. The star



Lul - la cacab Al - lab
Lulla (and) the star Allab

18. cacabi innamiru sa cacab Al - lab
were the stars seen, though the star Allab

khalabu[1] - va . . . . . D.P. Gut - tav ina lib
was misty. and by itself (?) Jupiter in the midst

nazuz - va
was fixed, and

19. cacab Lul - a ana urpāti pu - ul - lu - liv
The star Lula portends extended mists.

20. cacab Ni - bat - a - nu ana cacab Gir - tab dikhu
Mars the star of the Double Sword faces;

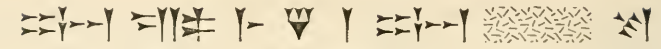
ina ecali rub - u-su ibas - si
in the palace its master is.

21. cacab Ni - bat - a - nu ana cacab Gir - tab dikhu
Mars the star of the Double Sword faces.

. . . . ina saplit - si itsab - bat
The Zodiacal sign by its lower part it seizes.

22. cacab nis akhu ana ab - zi
The star of the Foreigner portends flowing waters.

[1] The insertion seems to be an error.

23. 

cacab Sak - vi - sa ana cacab . . . . . dikhu
Mercury to the star . . (is) opposite.

sibir mat Accadi . . . . . .
The crops of Accad . . . . . .

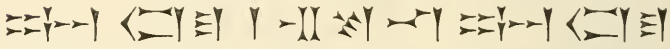
24.

cacab Im - su - gil - na ana mu - rak . . . . . .
The star Im-sugil-na portends . . . . . .

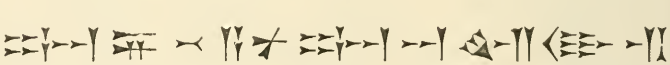
25.

cacab Ci - ib - bu - bu icassid . . . . . .
The star Cib-bubu is in the ascendant: . . . . . .

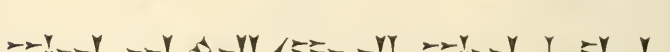
û sallim - mu . . . . . .
and peace . . . . . .

26. 

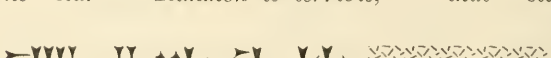
cacab Zibi ana . . . . . cacab Zibi
The star of the Wolf portends tempest. The star of the Wolf,



cacab Ni - bat - a - nu cacab Rimmon - icabbid
Mars, the star 'Rimmon-is-terrible.'

27. 

cacab Rimmon - icabbid cacab su - va ana
The star 'Rimmon-is-terrible,' that star for



śama *urpāti* (?) ibassi . . . . . .
mist (and) tempest is. . . . . .

28. cacab Zibi baladha . . . . . tim-mu
The star of the Wolf life . . . . . .

ilu Iś - śi cacab Gir - tab ka - bi
Uśśi the star of the Double Sword addresses.

ilu Ni - bat - a - nu ina libbi izzaz - va
Mars in (its) place is fixed; and

29. cacab pal - dar - a sukhal D.P. Tiskhu ana cacab
The star Pal-dara the messenger of Adar faces the star of the

Gir - tab dikhu ina libbi anni . . . . . .
Double Sword. In the midst of a cloud a storm rages (?)

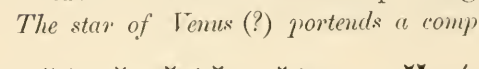
ibassi śama û rukhu khu- śu ala mata itsab-bat
There is mist; and wind . . . . . the city (and) land seizes.

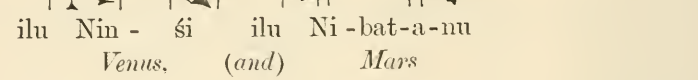
30. cacab Bar-tab- ba ana sam -suv - ti D.P. Nergal
The Double Star portends the despoiling of the War-god.

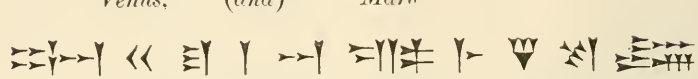
31. cacab Man-ma ana cacab Bar - tab - ba dikhu
The star of Mars to the Double Star (is) opposite:

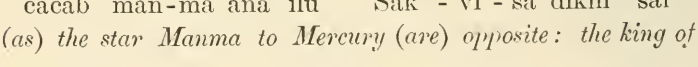
nunu imat
the prince dies.

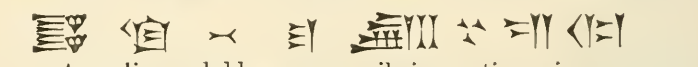
32.
cacab Nin - śi ana pal gamra
The star of Venus (?) portends a complete life.

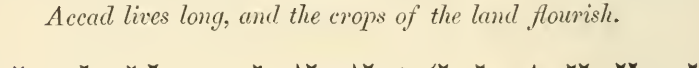
33. 
ilu Nin - śi ilu Ni - bat - a - nu
Venus, (and) Mars

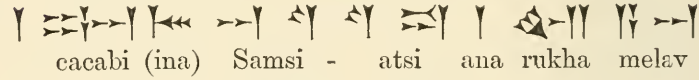
34. 
cacab man - ma ana ilu Sak - vi - sa dikhi śar
(as) the star Manma to Mercury (are) opposite: the king of

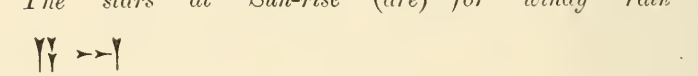

Accadi yulabbas - va sibri mati esiru
Accad lives long, and the crops of the land flourish.

35. 
cacabi (ina) Samsi - atsi ana rukha melav
The stars at Sun-rise (are) for windy rain


melav
(and) rain.

36. 
cacabi (ina) Samsi - atsi iz - mu - ru ina
The stars at Sun-rise rise; during


sanat - suati zunni û melav ibass'u
that year rain and flood are.

37. 
cacab Bibbu lu 13 lu 14 arci
The planets, either 13 or 14 (times), after

akhai itsu - ni * - va
one another had risen. As before.

38. cacabi siptu a - na rukha . . . . . .
The stars, a memorandum. For wind self-sent.

39. (cacabi) izarra -khu a - na tib rukhi
The stars rise: for the blowing of wind.

40. (cacab) bibbi i - ba - an - u - va
The planets intervene, and

REVERSE.

1. . . . . rukha abaca
. . . . . *a destructive wind.*

2. . . . . rukha abaca
. . . . . *a destructive wind.*

3. . . . . yudannatu - va
. . . . . *it will linger, and*

4. cacab . . . . . śu di - nu ic - car
The star . . . . . judgment is estranged;

* zakhir * palig
the same is small; the same is divided.

5. ilu bibbi û cacabi sami zarakhi -
The planets and the fixed stars their risings

su - nu itsabbitu - va kha - an - dis la innammaru
take, and duly are not seen.

6. cacab An - ta - ru - ru - ba rukhu abacu
The star Anta-ruruba, a destructive wind.

7. cacabi sami ma - rab izarrikhu - va
The fixed stars in numbers rise, and

8. yu - lu D.P. bibbi nuri ina si - na lâ
rise the planets; the lights (of the planets) among them

khalibi va kha - an - dis innamaru
(are) unclouded, and duly (the planets) are seen.

9. Napkharis cacab E - tur nabu ar - cu
After all (the rest) the star of the House of Rest (as) messenger

napiaru ar - cu E - tur
follows, or the dawn follows the House of Rest.

10. Napkharis cacab E - tur - ra ikhkharrats - va
After the rest the star of the House of Rest is produced,

same . . . . .
and the sky . . . . .

11. . . . . a - na nap - khar
. . . . . *for the whole of*

sami ikhkharrats . . . .
heaven it is produced . . . .

12. . . . . a - na bi - nu - ut
. . . . . *To the offspring of*

sami i -kab- bi
heaven it speaks.

13. Napkharis cacab Ru - tur . . . . . .
Altogether the star of the Giver of Rest . . . . . .

. . . . . .
. . . . . , ...

14. Napkharis cacab Śal . . kar - ga yu -se- pul
altogether the star Śal-karga causes to descend.

15. Gut - An - na se - pi - id tarbats - su atsu D.P.
The Bull of Heaven, the arbiter of its setting, rising in the time of

Anu kharran Samsi . . . . . cas - ut D.P. A-nu
Anu (in) the path of the Sun . . . . the period of Anu

16. kharran D.P. Samsi ris Bit - tarbatsi - su . . . . .
the path of the Sun, the chief of the House of its Setting . . . . .

tam - ma - sa . . . . . ut u rib - bu - ti
during the day . . . . . *and rains.*

17. ina arakh Airu cacab Gir -tab û cacab ...
In the month Iyyar the star of the Double Sword and the star

. . . . . i - kharrats
. . . . . *produces.*

18. ina irakh Sivanu D.P. Ni -bat - a nu . . . . . .
In the month Sivan Mars . . . . . .

i - kharrats
produces

19. 6 D.P. Ni -bat-a -nu . . . . . .
Six (times) Mars . . . . . .

20. ina arakh Ululu cacab Bir cacab Niru
In the month Elul the star Bir the star of the Yoke

icsud- va . . . . . .
overtook, and . . . . . .

21. ina arakh Dūzu cacab Kak - śi - di cacab
In the month Tammuz the star Kak-śidi the Double Star

Bar-tab- ba cacab Utu- al - tar icsudu - va
(and) the star Utu-altar overtook, and

22. cacab Gu - la cacab Al - lul cacab Id -khu
The star of Gula, the star Allab, the star of the Eagle.

cacab Utu- al - tar cacab Sak - vi - sa ina
the star Utu-altar (and) Mercury at

yumi-su . . . . . ip -se-va
that time . . . . . : . . . . and

23. cacab Al - lul a - na cacab śukh - biru
The star Allul to the star of the Prolific Family

i -ka - bi - va a- nir ma- su - u
speaks, and (is) leader of the week(?)

24. cacab Mar - bu - da cal sanat illac . . . . . .
The star of the Long Road all the year goes . . . . . .

ir -ma-a i - lam -ma-a
. . . . . *approaches*

25. ina arakh Addaru cacab nuni cacab Lul-a cacab
In the month Adar the star of the Fish, the star Lula,

D.P. Man-ma icassidu-va cacab Maruduc a - na
Mars overtake, and the star of Merodach to

Gut - tav i -kab- bi
Jupiter speaks.

26. za-man ma-a cacab Maruduc a - na cacab Utali (?)
At the same time the star of Merodach to the star of Rest (?)

i - kab - bi
speaks.

27. cacab sa arci - su nazu - zu cacab Sib -
The star which after it is fixed the star of the

zi - an - na D.P. Pap-sukul im - sak e - cu
Shepherd of the Heavenly Flock. Pap-sukul portends a great wind.

28. Sin tarbatsa ipakhkhir - va cacab Sib - zi-
The Moon sets, and the star Sib-zi-

an - na ina lib - su izaz . . . . . ina mati dumki
anna in its place is fixed. Crops (?) in the land (are) good.

29. cacabu sa ina zi - ikh si - id cacab
The star which in the neighbourhood of the star

. . . . nazu-zu cacab Bir cacab Niru
. . . . is fixed, the star Bir, the star of the Yoke,

cacab Gu - la cacab . . . . . cacab
the star of Gula, the star . . . . . (and) the star

Śukh - beru
of the Prolific Family.

30. cacab Eratu sa ina birit[1]

The star of the Pregnant Woman which in conjunction with

cacab Si - bi û cacab A - nuv izu - zu

the star Sibi and the star of Anu, is fixed,

cacab A - nuv cacab Lu - lim

the star Anu the star Lulim.

31. cacab Ma - a - su sa ina pan D.P. A - nuv

The star of the Week which before Anu

izu - zu D.P. A - nuv cacab Al - lul

is fixed, Anu, the star Allul

32. cacab Eratu sa ina pan Bil - (cit) si - id

The star of the Pregnant Woman, which before Bel on

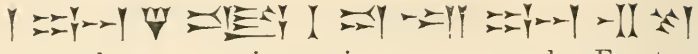
rukh sadi śi - kid a - na cacab Su - gi

the east side declines, to the star Su-gi

i - kab - bi

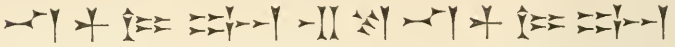
speaks

[1] *Ribanna*, which the Syllabaries render by the Assyrian *biritu*, is not of unfrequent occurrence in the astrological tablets. Thus W.A.I. III, 57, 40, 41, we read: "The star of the Double Ship, the star *Ner-zak-Zamama* and the star of the Eagle, three stars (*wanting*); two conjunctions the star of the Eagle *makes* (?)."

33. 

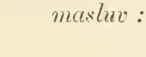
cacab sa arci -su izu - zu cacab En - te-

The star which behind it is fixed, the star Entena-



na -mas-luv cacab En - te - na -mas-luv cacab

masluv : the star Entena-masluv, the star



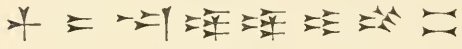
Al - lab

Allab.

34.

cacab Erib - me - gali a - na cacab

The star of the Descent of Great Waters to the star

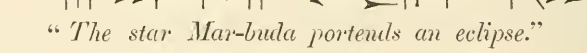


Bar-tab - ba - tur - tur i - kab - bi

Doubly Small speaks.

Colophon.

The tablet begins in the place—



"*The star Mar-buda portends an eclipse.*"

It goes down to—

"*The star Icu in the month Nisan was seen*"

(the first line of the next Tablet).

Another tablet of much the same kind as this is lithographed in W.A.I. III. 52, 1. It describes the phases of Jupiter, and is interesting as containing a notice of an

ancient Elamite astronomer, showing that the study was carried on in that country as well as in Babylonia. The tablet is unfortunately much broken. It runs as follows:—

1. cacabu izarrikh-va tsi - ri - ir -su cima urru
The star (Jupiter) rises; and its body, like the day,

na - mir
is bright.

2. ina tsa- ra - ri -su cima nam -mas- ti .....
In its body like the blade of a double sword

zanba isacc- in
a tail it forms.

3. libit si - i dumkatu ul -khi bil Biti va
This omen (is) favourable; rejoicing (of) the master of the house

sa mati ca - la - sa
and of the land all of it.

4. enu-va bilu la ina mati cali ibas - si
At the same time a master not in the whole of the country is.

5. rag - gu ippalaq cit - tu ibas - si dan - nu
Wickedness (?) is divided. Justice is done. A strong one

i - śar - ri
judges.

6. . . . . bil biti-suati va sarri suati
. . . . . *the master of that house and that king*

7. ina cit - ti -su iz - az tas - mu û sallim-mu ina
by his righteousness fixes. Obedience and peace in

mati ibassi
the land is.

8. . . . . an - ni - u sa is . . . . . .
. . . . . *This (is) what* . . . . . .

9. cacabu rabu ul - tu ti - ib . . . . . .
The Great Star from the orbit [*northern*]

10. a - na ti - ib rukhi zululi . . . . . .
to the orbit southern . . . . . .

11. mi - si - ikh -su cima nam - mas - (ti) . . . .
its measurement [*i.e., size*] *like* (*the blade of a double sword*) . . .

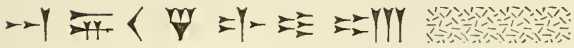
12. sa - ki ta - ri - tu . . . . . .
above, returning . . . . . .

13. ina li - in - ni di . . . . . .
in the dwellings . . . . . .

14.

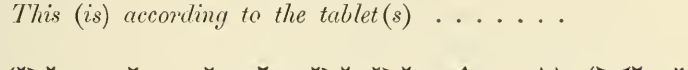
D.P. Bilu ma- li - lu . . . . . .

Bel who fills . . . . . .

15. 

an - ni - u sa pi - i duppi . . . . . .

This (is) according to the tablet(s) . . . . . .

16. 

ci - i D.P. D.P. Nabu - cu - dur - yutsur mati Elami

According to Nebo-chadrezzar the Elamite

. . . . . .

. . . . . .

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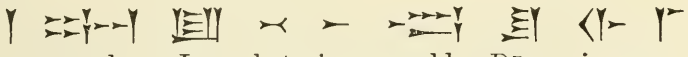
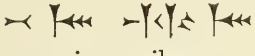
17. 

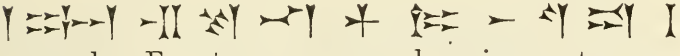
cacab Lu - bat ina arakh Dūzu innamar

The Planet (Jupiter) in the month Tammuz is seen.



pagri ibassu

Corpses are.

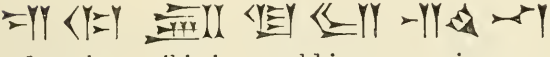
18. 

cacab En - te - na -mas - lum ina atsu - su

The star Entena-maslum at its rising the

cacaba itamm - ikh

Planet holds.

19. 

dumuk sibirri makhiru cinu

Richness of crops. The tariff (is) fixed.

COLOPHON.

an - nu - ti sa D.P. Gut - tav sa D.P. D.P.

These (are the phases) of Jupiter, (reported) by

Nabu - mu - se - tsi

Nebo-musetsi.

The favourite object of observation among the planets, however, was not Jupiter, but Venus. A long table of its phases is translated in the Appendix, and numberless shorter tablets relating to this star are met with in the astronomical library. Here are one or two of them, beginning with one which records the various names under which the planet was known at various times and places.

W.A.I. 53 :—

24. "[In the month Chisleu] Venus ( ) is called the spark of Gula ( ).
25. In the month Tebet, Venus is the spark of the Double Ship ( ).
26. In the month Sebat, Dilgan of Babylon."

The latter star, called Icu by the Assyrians, was Merodach or Mercury in Sivan, while, as we have before seen, it was also identified with Jupiter, and in W.A.I. II, 39, seems to appear as a synonyme of Mars. We can only reconcile these statements by supposing that it was the name of a fixed star which gave its title to whatever planet happened to be near it at a particular time. The tablet then proceeds :—

27. "A royal crown it *gives* (?) to Merodach.
28. In the month Adar the spark the Fish of Hea is Venus (and also Mercury).
29. In the month Adar on the third day (Venus) rises and in Nisan . . . .
30. Venus is a female at sunset.

31. Venus is a male[1] at sunrise.
32. The spark Venus at sunrise (is) the Sun-god; thus a male (*zi-car sacnu*) and the offspring of . . . .
33. The spark Venus at sunset (is) the god Adar; thus an androgyne and the offspring of . . . .
34. The spark Venus at sunrise (is) Istar of Agane by name.
35. The spark Venus at sunset (is) Istar of Erech by name.
36. The spark Venus at sunrise (is) Istar among the stars (by name).
37. The spark Venus at sunset (is) *Billat Ili* (Queen of the gods) (by name).
38. The star *Dirrutimne* ([illegible]) (is) Venus. A name of Mars also ([illegible]).
39. (This line I cannot translate.)
40. . . . . Venus at appearance Saturn.
41. . . . . makes an eclipse."

The following three lines, which are much mutilated, give the names of the two astronomers who composed the tablet.

Other tablets relating to Venus are the following :—

W.A.I. III, 57, 4 :—

1. "Venus drew forth a rising ([illegible] *zir-kha imsukh*[2]). Misfortune.
2. In its orbit duly it grows in size (*iltanaka'a*).
3. Venus a rising does not kindle. Prosperity.
4. Afterwards its station it makes to ascend (*akhis cibirut-śu yusallav*), and proceeds; and
5. Venus rises, and the star Niru like a flag floated (*cima dagilu idgul*);

[1] The Assyrian word here is very remarkable, *zi-ca-rat*, as if we could coin a term like "male-ess." It translates the Accadian [illegible] "male-female."

Imsukh "he measured" or "drew forth" is connected on the one hand with משח "measure" and on the other with משך "draw forth" or "extend." The change of ך into ח meets us in other words.

6. the view is clear (*amiru emuru*); the country is smitten;
7. rebellion is hostile; cities by arms are oppressed;
8. Venus and Mercury are in conjunction ( ); and
9. Venus rises, and before the star *Mar-buda* goes, and
10. the view is clear ( ). To the third day it goes, and *serrim.*
11. Venus before the star *Sugi* goes" . . . .

Here the tablet is broken, and the Reverse proceeds as follows:—

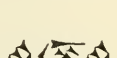
1. "Venus faces the star of the Gate . . . . ;
2. Venus faces the star of the Fish: a destruction takes place.
3. Venus faces the star Sukh-biru, and Venus faces the star of the Foundation: a destruction takes place.
4. It faces Mars.
5. *Extract* (?) from 'the Illumination of Bel,' concerning a report according to a tablet no longer existing (*supar pi sa pi duppi yāni*),
6. beginning 'Venus drew forth a rising.' Palace of Assur-bani-pal,
7. great king, mighty king, king of multitudes, king of Assyria,
8. on whom Nebo and Tasmit have conferred favor, and like (his) father have amply extended."

W.A.I. III, 57, 7:—

1. "Venus in the month Tammuz; the gods Sin (the Moon), Śar-nerra,
2. (and) Gallamta-uddua are close to the horn of the planet.
3. The star of the Double Ship is seen with them; and on the third day they move.
4. Dearth of wheat and barley is in the land.
5. The god Śar-nerra and the god Gallamta-uddua (are)
6. the god Jupiter and the god Mars."

1. "Venus in the month Chisleu in the midst of the stars on the third day appears.
2. Their passage (*etic-sunuti*) [it makes].
3. The stars to the planets. . . ."

1. "Venus in the month Tebet faces the Sun. Good to the king. The king . . . .
2. rolls. Venus faces Saturn.
3. Venus in the month Tebet *rises* (?). Rain at sunset.
4. The king establishes his hostile arms in the land. The troops (march).
5. Seven heads at sunset. . . . ."

1. "Venus in the month Sebat (makes) a rising (*nipkha*) in *sereti.*
2. The crops of the land flourish. The son . . . .
3. Venus with tails at sunrise is seen; and
4. Venus in Sebat on the second and third days is in the ascendant; and (is) on the horn of (the Sun?)
5. when it rises. In the month Sebat, the first day, over the horn of the star Niru
6. it passes. Peace in the land is established.
7. The same. All the land is hostile.
8. The star of the Double Ship. The head of the star Sukh-biru.
9. In the month Sebat, in front of the star  Sukh-biru (Venus) passes; and
10. Venus in the same month is seen; and on the left of it there is seen . . . . Pregnant women
11. some of their children perfect.
12. Paleness (*sipa*) or mistiness. Mars
13. on the left of it shows."

W.A.I. III, 59, 11:—

1. "Venus at sunset . . . .
2. Venus at . . . .
3. from the first day to the thirtieth day
4. at sunset disappeared. The crops of the land flourish.
5. Venus made a *fixed station* (?).

6. The days of the prince are long.
7. Justice is in the land.
8. Venus from the sixth to the eleventh days of the Moon's age (*ina cassut D. P. Hea*),
9. [This line is lost.]
10. . . . to the land of Palestine . . .
11. [This line is also mutilated.]
12. The Moon set, and the stars in its place were fixed.
13. During this year women bear male children.
14. The Moon set, and the star *Sugi* in its place is fixed.
15. During this year, troops of men
16. to (conquest march?).
17. (The report) of Istar-sum-esses."

Mars was nearly as favourite an object of observation as Venus. We have already seen that it bore no less than seven names; and one of the works contained in Sargon's Library was devoted to the record of its phases. Here are some of the tablets which relate to this planet:—

W.A.I. III, 59:—

1. "In the month Elul, Mars is seen; and
2. the crops of the land flourish.
3. The heart of the land (is) good . . . .
4. The planet Saturn . . . .
5. Prosperity of men . . . .
6. Mars at (its appearance)
7. has a lofty (position?).
8. (Report) of Nebo-ikbi."

W.A.I. III, 59, 4:—

1. "Mars approaches (*ictarab*) the star Allul.
2. In its place it sets (*etarab*). A watch I kept.
3. After the full interval of time again, as it down
4. had gone, it rose, and . . . .
5. when it had fully risen, an account of it to the king my lord (I sent).
1. The birds[1] belonging to the lord my king *fed* (?).

[1] This translation is extremely doubtful. The Assyrian is *iśśuri*, not *itstsuri*, "birds." See further on the inscription quoted from III, 53, 3, line 21.

2. Also the star Manma (Mars) faced the star Allul. A prince in . . . .
3. as he ruled, lives. His *strength* (?) . . . .
4. A numbering of Accad takes place.

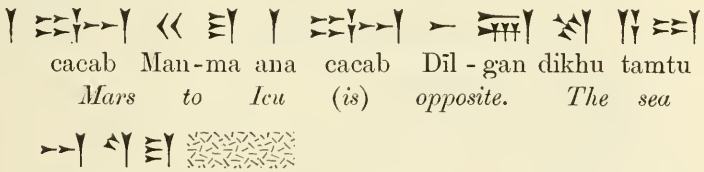
1. The birds belonging to the king my lord *fed* (?) . . . .
2. Also the star *Venus* (?) in the midst of the *sky* (?) . . . .
3. The king of Subarti . . . .
4. This is the title of the *information* (?) . . . .
5. The king my lord in his heart . . . .

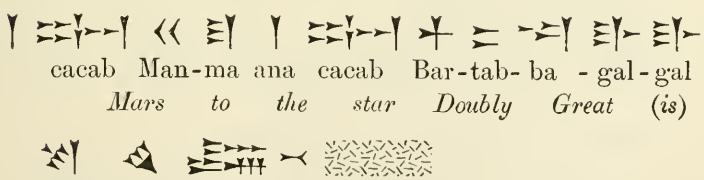
1. This (is) the title: the Air-god (is) fine: with . . . .

1. In the month Ab, the Air-god (is) fine: afterwards the god rains.
2. A malady oppresses. Storms in the heaven fall.
3. Death in consequence of the rain the Air-god sends.
4. . . . . Famine is in the land.
1. (The report) of Nebo-kullani."

The defective state of this tablet renders its translation peculiarly difficult. The following fragment, which speaks of the planet under its designation of Manma, follows a list of the events consequent upon the conjunction of "the star of Death" with other heavenly bodies.

W.A.I. III, 57, 2 :—

1. 
cacab Man-ma ana cacab Dil-gan dikhu tamtu
Mars to Icu (is) opposite. The sea
D.P. Samas . . . . .
the Sun-god . . . . .

2. 
cacab Man-ma ana cacab Bar-tab-ba -gal-gal
Mars to the star Doubly Great (is)
dikhu dhabi śarri . . . . . .
opposite. Good to the king . . . . . .

3. cacab Man - ma ana cacab Nuni dikhu
Mars to the star of the Fish (is) opposite.

mi - khir - tuv nuni mahduti ina mati nabu
The presence of many fish in the land (is) reported.

śimmu . . . . .
Plague . . . . .

4. cacab Man - ma ana cacab Bar . . . . . khi
The star of Mars to the star Bar . . . . . khi

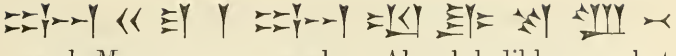
dikhu abu um -ma yuballadh-va sarru . . . . .
(is) opposite. The father ever lives, and the king . . . . .

5. cacab Man-ma ana cacabi dikhu pulug mati
Mars to the stars (is) opposite. Division of the land ;

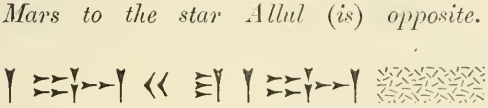
sapikh . . . . .
smiting . . . . .

6. cacab Man-ma ana D.P. Bel -mi-khi- ra dikhu
Mars to Bel the Confronter (is) opposite.

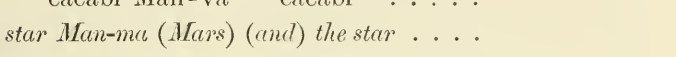
lib mati dh - ab . . . . .
The heart of the land (is) good . .

7. 

cacab Man-ma ana cacab Al - lul dikhu ru -bat
Mars to the star Allul (is) opposite. Increase of

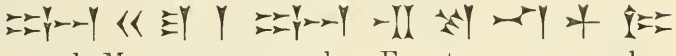


cacabi Man-va cacabi . . . . .
the star Man-ma (Mars) (and) the star . . . .

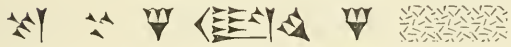
8. 

cacab Man-ma ana cacab Sak - vi - sa dikhu ina
Mars to Mercury (is) opposite. In

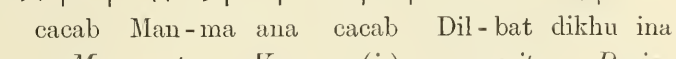
mati-su śarrû yulabbar-va . . . . .
his land the king remains; and . . . .

9. 

cacab Man-ma ana cacab En - te - na -mas - luv
Mars to the star Entena-masluv (is)



dikhu casad sa śimmi isaccin . . . . .
opposite. Attack of pestilence takes place . . . .

10. 

cacab Man - ma ana cacab Dil - bat dikhu ina
Mars to Venus (is) opposite. During

sanni - suati ana 6 arkhi śarru - su
this year for six months the king aforesaid

yulabbar - va . . . . . .
remains, and . . . . . .

11. [illegible]
cacab Man-ma ana cacab Bibbu dikhu ab- ic
Mars to Jupiter (is) opposite. Overthrow of

[illegible]
mati . . . . .
the land . . . . .

Here the inscription is broken off. Bel the Confronter, which is named elsewhere immediately after the star of Martu (or the West) (III, 57, 69), is perhaps to be identified with the "Bel who goes before the star" in the planisphere to which I have referred before. In this case it would denote the Great Bear from the eleventh to the fifteenth days of the Moon's age. Very similar in character to the tablet I have just been quoting is another, recording the conjunctions of the stars of the Eagle and the Bird *Urakhga* with others. This again is shockingly mutilated; but the Reverse contains a colophon describing it as belonging to "the fifty-seventh tablet of Bel." What is left may be thus translated:—

W.A.I. III, 52, 2:—

1. "The star *Urakhga*[1] faces Mercury . . . .
2. The star *U.* set (*ittanapla*). Desertion (*ezibu* [illegible]) in the midst . . . . .
3. The star *U.* on the south side set . . . .
4. The star *U.* had a halo around it; the tariff (is) fixed, the crops of Palestine . . . . .
5. The star *U.:* this star (is) very misty (*malitis adru*); the crops . . . . .
6. The star *U.:* this star (is) not misty; pestilences in (the country are).
7. The star *U.:* this star (is) greenish-yellow; floods in the channels . . . . .
8. The star *U.:* in its place of setting (*cibiru*) the god its head lifts up; during that year the same.
9. The star *U.:* in its place of setting (the god) similarly lifts up its head. During this year floods descend.
10. The star *U.:* this star is like the god of Fire. Much rain falls.

[1] Or, *Ukhulaga.*

11. The star *U.*: this star (is) like the god of Fire in the middle. Three times the star a stoppage (*sippakh*) [makes] . . . . .
12. The star *U.* faces the star Prince of the Earth. *Ganzi*[1] in all the land is.
13. The star of the Eagle faces the planet (Jupiter). Sowing of all plants (is) lucky.
14. The star of the Eagle faces the planet. The Air-god inundates.
15. The star of the Eagle over the star Ukhulaga-khu is paramount (*ibil*). Wheat (is) flourishing.
16. The star of the Eagle in the place of the Moon is fixed. A mighty king smites.
17. The star of the Eagle on the left horn of the Moon is fixed. The country (men cross).
18. The star of the Eagle on the right horn of the Moon is fixed. The country is . . . . .
19. The star of the Eagle (is) misty. The cattle are diminished; the inhabitants . . . . .
20. The star of the Eagle measured a measure (*i.e.*, rose, *meskha imsukh*). The planet . . . . .
21. The stars named after birds; when the star of the Eagle is seen, inundations."

Another tablet, also somewhat broken, deals with *Sakvisa* or Mercury.

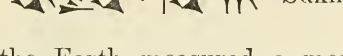
W.A.I. 59, 3:—

1. "Mercury approaches, and
2. the place of the god (Gallamta-uddua?) occupies.
3. He is supreme (*bahil*). There is mist.
4. The land . . . . . is high.
5. The gods give peace to Accad.
6. Frequent rains . . . . . are present.
7. In Accad wheat and barley flourish; and
8. The tariff is (lowered); the god a measure again gives.
9. The gods in heaven in their courses (*nizzalti*) go.
10. Their altars are *resplendent* (?).
11. Mercury diminished in *serti*;

[1] *Ganzi* (*passim*) is connected with *gunzi* "cattle," which is found in W.A.I. I, 46, 23.

12. hostile kings contend.
13. Mercury in *serti* . . . . . (*ictur*).
14. The king is prosperous: the heart of the country (is good. [This was lost in the original of the copy; hence we find *khibi* "wanting."])
15. Mercury is supreme.
16. The king goes to supremacy.
17. Merodach . . . . . the throne establishes.
18. Mercury during the period of Anu is seen.
19. There is fog, and the crops of the land (are) prosperous.
20. (The report) of Bulludhu."

Next to the Planets in importance was the Pole-star, called Tir-anna or *Dayan-same* or "Judge of heaven," to which a special treatise was devoted in Sargon's Library. Dayan-same was also named "the god Caga-gilgati" (𒀭𒋗𒄭𒂗𒈪 𒁹𒁹𒁹

2. Jupiter in the star  Śukh-biru lingers, and
3. the star Prince of the Earth measured a measure (rose). The crops *ganzi* of the land are flourishing.
4. Jupiter like one disappearing duly is seen; and

1. the star Entenamaslum at its rising, the waves of the sea (*mulukh*) at the beginning of the month Tammuz over the country raises (*nasi*);
2. the crops of the land flourish, the tariff is good (*nahid*).
3. Jupiter like one disappearing duly is seen; and
4. the star Entena-maslum at its rising is faint (*abil*). The crops (are) not prosperous. (There is) overthrow.
5. Jupiter, like one disappearing, a storm that god (the planet) in heaven crosses."

We may now pass on to the Moon, the principal object of Babylonian worship and observation. As befitted a nation of astronomers, the Moon was considered prior to the Sun, and the originator of civilisation. The number of tablets relating to the appearances of the Moon, its eclipses and conjunction with the Sun, is very large. The great work, part of which I have translated in the Appendix, is wholly concerned with the eclipses of the Moon and Sun. The two luminaries, indeed, cannot be well separated from one another; and the method of Babylonian observation and the events supposed to be portended by the various phænomena observed can best be learned from a selection of the tablets which deal with this part of the subject. The months were lunar and were divided into two lunations; and the days on which the quarters of the Moon began as well as the beginning of the second lunation were called days of *sulum* or "rest," on which certain works were forbidden. Each lunation was further subdivided into periods of five days each, called *cassudi* or times of "ascendancy," the first *cassud* being given to Anu, the second to Hea, and the third to Bel. During the third period, however, it was only the orbit which was called Bel, the body of the orb being still termed Hea. The tablet which tells us this is the following.

W.A.I. III, 55, 3 :—

1. Sin ina tamarti - su
The Moon at its appearance

2. 5 yu - mi tam - khir
for five days was visible.

3. istu yumi 6 adi yumi 10
From the sixth day to the tenth day.

4. ca - li - tuv
it (is) full.

5. istu yumi 11
From the eleventh day

6. 5 yu - mi agu yur - ri - im
for five days a crown surrounds (it).

7. D.P. Sin D.P. A - nu D.P. Bil
The Moon (is) Anu, Bel,

8. D.P. Hur - ci
the Protector of the Earth,

D.P. Bil - zu
(and) the Lord of waxing (and waning)

The same (is) the Moon

. . . . . .

1. istu yumi 1 adi yumi 5
From the first day to the fifth day

2. D.P. A - nu - u
(*the Moon is*) *Anu;*

3. 5 yu - mi
for five days

4. D.P. He - a
(*it is*) *Hea;*

5. adi yumi 15
to the fifteenth day

6. ti - ib tam-ma D.P. Bil
the orbit during the day (*is*) *Bel,*

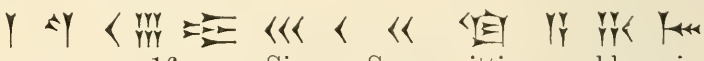
7. u D.P. He - a tam - tsu - su
and Hea (*is*) *its mass.*

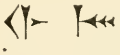
8. D.P. Sin sa E - *lam - (ti)
The Moon of Elam . . .

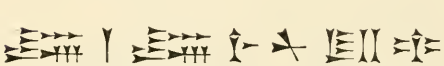
. . . . . .

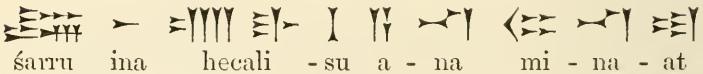
The end of the tablet is broken off. The names of the several periods seem to have been derived from the quarter of the heaven in which the Moon was observed, and which was assigned to the dominion of some special deity. Thus, in W.A.I. III, 56, 52, we are told that "on the fifteenth day the Moon and Sun draw near to Anu" (*sin u samsu ana il A-nuv i-car-ra-bu*). I will now give some specimens of reports of the conjunction of the Moon and the Sun. and the predictions derived from such an occurrence.

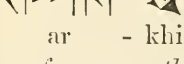
W.A.I. III, 58, 1:—

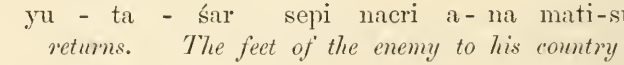
1. 
yumu 16 Sin u Samsu itti a - kha - i
The sixteenth day, the Moon and Sun with one another

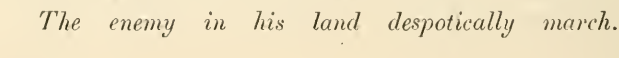

inammaru
are seen:

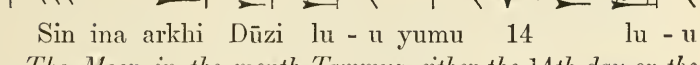
2. 
śarru ana śarra nucurti yum - ar
king to king hostility sends.

3. 
śarru ina hecali - su a - na mi - na - at
The king in his palace for the space


ar - khi
of a month

4. 
yu - ta - śar sepi nacri a - na mati - su
returns. The feet of the enemy to his country (go).

5. 
nis - nacri ina mati - su sal - dha - nis itallacu
The enemy in his land despotically march.

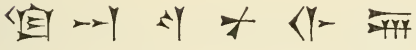
6. 

Sin ina arkhi Dūzi lu - u yumu 14 lu - u

The Moon in the month Tammuz, either the 14*th day or the*

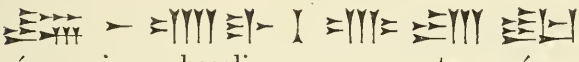
yumu 15

15*th day*

7. 

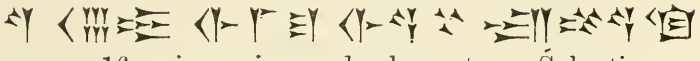
itti D.P. Samsi la inamm - ir

with the Sun is not seen.

8. 

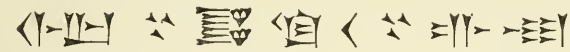
śarru ina hecali -su yu - ta - śar

The king in his palace returns.

9. 

yumu 16 inammir - va dumku mat Śubarti

The 16*th day it is seen, and fortunate (is) the land of Subarti.*

10. 

limuttu mat Accadi u mat Akharri

Unlucky (is) the land of Accad and the land of Palestine.

11.

sa D.P. Nebo - kul - la - ni

(*The report*) *of Nebo-kullani.*

W.A.I. III, 58, 2 :—

1. "The Moon in the month Tammuz either the fourteenth day or the fifteenth day
2. with the Sun is not seen.
3. The king in his palace turns.
4. The sixteenth day the Moon and the Sun with one another
5. are seen. King to king

6. hostility sends (*isappar*). The king in his palace
7. for the space of a month turns.
8. The feet of the enemy to his country go.
9. The enemy in his country tyrannically march.
10. The Moon the sixteenth day is seen, and evil to Accad, prosperity to Śubarti. (The report) of Sumai."

W.A.I. III, 58, 4:—

1. "The Moon in the month Niśan, either the fourteenth or the fifteenth day,
2. with the Sun is not seen.
3. There are (*ibas-suv*) soldiers. The enemy to (his country march).
4. They will plunder (*ikhabbatuniv*) and the country . . . .
5. A crown in the land is . . . .
6. The sixteenth day the Moon and the Sun with one another (are seen).
7. King to king hostility (sends).
8. The king in his palace (turns).
9. (The feet) of the enemy (to his land go).
10. The enemy in his country tyrannically (march).
11. The sixteenth day the Sun and the Moon (are seen . . . .)
12. The king of Śubarti . . . . . .
13. (The report) of Istar-sum-esses."

W.A.I. III, 58, 5:—

1. "The Moon the Sun overtook, and with it had lingered. (It is) horned (*karnāta*).
2. In the land is justice, and the son with his father justice determines upon.
3. Peace to multitudes.
4. The fourteenth day the Moon and the Sun with one another are seen.
5. The face is steadfast, the heart of the land good. The gods of Accad
6. for prosperity devise (*ikhaśaśu*). Joy of heart in the soldier is.

7. The heart of the king is good. The cattle of Accad
8. in safety in the desert lie down (*irabbits*)."

W.A.I. III, 58, 5 :—

1. "The Moon and the Sun are balanced (*sitculu*). The country is established (*ican*). Food (*atmu*)
2. continuously in the mouth of the people continues.
3. The king of the land the throne perpetuates.
4. The Moon and the Sun are separated (*sutatu'u*). The king of the land enlarges (his) ears (*uznu yurappas*).
5. (The report) of Sumai."

W.A.I. III, 58, 6 :—

1. "The Moon and the Sun are balanced. The country is established.
2. Daily food (*atmu cenu*) is in the mouth of the people.
3. The king of the land the throne perpetuates.
4. The Moon and the Sun are separated[1] (*sutatu'u*). The king of the country the ear
5. enlarges.
6. The fourteenth day the Moon and the Sun with one another are seen.
7. The face (is) firm, the heart of the land good,
8. the gods of Accad
9. for prosperity
10. devise.
11. Joy is in the soldier's heart.
12. The heart of the king (is) good.
13. The cattle of Accad
14. in the desert safely lie down.
15 (The report) of Istar-sum-esses."

W.A.I. III, 58, 7 :—

1. "The Moon and the Sun (*ilu Sa-mas*) are balanced (*sitkulu*).
2. Daily food is in the mouth of the people.

[1] Literally, "caused to be gone," the passive Istaphel of אתה which in Job xvi, 22, is used of the "passing away" of years.

3. The king of multitudes the throne perpetuates.
4. The fourteenth day (the Moon) is seen.
5. A favorable wind (*rikhti dhibbi*). Prosperity
6. to the king my lord. In the midst of a cloud
7. (the Moon) goes. We did not see (it).
8. The Moon at its appearance in clouds was hidden.
9. Rain comes down.
10. There is *fog* (?) and movement (*ilpu û alacu*).
11. The Moon at its appearance piles the sky (with clouds).
12. Rain falls.
13. In a thick (*sapicti*) cloud it is seen; and
14. (this is the report) of Nebo-akhi-erba."

W.A.I. III, 58, 9:—

1. "The (fifteenth) day the Moon and the Sun
2. with one another are seen.
3. A strong enemy
4. his arrows in the land lifts up.
5. The altar of the great gods he digs up.
6. The Moon and the Sun are not in conjunction (*la yuci'*) and (the Moon) waxes (*irbi*).
7. Appearance of lions
8. and hyænas.
9. Report of Nebo-musetsi."

W.A.I. III, 58, 11:—

1. "The Moon the Sun overtook (*icsudav*), and with it had lingered (*iddintu*).
2. In the land is justice (𒀀𒀀𒀀), and the son with his father
3. justice determines (*citti itamu*).
4. The fourteenth day the sky is seen; and
5. the Moon and the Sun are separated (*sutatu'u*).
6. The king of the country makes broad the ears.
7. On the fourteenth day of the month (of the star) Uśśu
8. the sky will be seen (*in-nam-ma-ru*).
9. The fourteenth day the Moon and the Sun with one another are seen.

10. The face of the land (is) firm; the heart of the land (is) good;
11. the gods assign Accad to prosperity;
12. joy possesses the heart of the inhabitants;
13. the cattle of Accad in safety
14. in the desert lie down.
15. (The report) of Bel-sum-iscun, the chamberlain."

W.A.I. III, 58, 12:—

1. "The Moon out of its reckoned-time is seen.
2. The tariff is small.
3. The twelfth day with the Sun it is seen, and
4. contrary to their calculated time the Moon and the Sun
5. with one another are seen.
6. A strong enemy ravages the land.
7. The king of Accad under the enemy is placed.
8. The twelfth day with the Sun (the Moon) is seen; and
9. the twelfth day it is seen; and evil to Accad,
10. prosperity to Elam and Phœnicia.
11. Evil to Accad it (is).
12. (The report) of Balaśi (Beleśys)."

W.A.I. III, 58, 13:—

1. "The fifteenth day the Moon and the Sun with one another
2. are seen. A strong enemy
3. his weapons against the land lifts up (*inassa'a*).
4. The great gate of the city the enemy digs up.
5. The star of Anu arose (*meskha imsukh*).
6. The enemy the streams of water poisons (*name me ikhammits*).

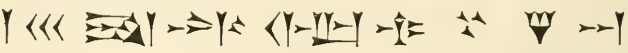
W.A.I. III, 51, 4:—

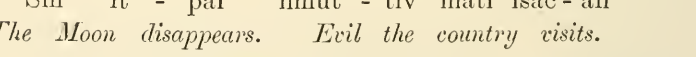
1. "The Moon the Sun does not face (*la yuci'*) and waxes.
2. Appearance of lions and hyænas.
3. The fourteenth day with the Sun it is seen, and
4. the Moon out of its reckoned time is seen.
5. Inundation (*śapakh*) of the city.

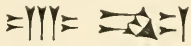
6. The fifteenth day with the Sun it is seen.
7. Behind it in the month Tisri . . . . . .
8. during the day it is full (*yusallam*).
9. (Report) of Balaśi."

These extracts are taken from the great work on Moon-portents, part of which is translated in the Appendix, and in which the observations and records of so many generations have been summed up for the use of Sargon's Library at Agane. It will be noticed that the Babylonians were sufficiently advanced in their astronomical knowledge to be able to predict a conjunction of the Sun and Moon; though their materials were not perfect enough to allow such predictions to be always verified. It will be seen that the same was the case with eclipses of the Moon. They had discovered the nineteen years' period, and had begun to predict eclipses long before the days of Thales. But here, too, their expectations were sometimes disappointed. A large part of their astronomical literature consists of eclipse observations. Portions of the principal work on the subject are given in the Appendix. A few more detached inscriptions may be added in this place.

W.A.I. 58, 14 :—

1. 
Sin it - pal limut - tiv mati isac - an
The Moon disappears. Evil the country visits.

2. 
Sin ina la mi - na - ti -su bi - ib - luv
The Moon out of its reckoned-time midway


yu - bil
comes.

3.
atala isac - an
An eclipse it makes.

4. D.P. Samsu ina tammi utala zunna tarbatsa ipakhkhir

The Sun during the day darkness, rain, (and) disappearance makes.

5. atala Elamti isac - an

An eclipse (in) Elam it causes.

---

6. ina arakh Cuzallu ma - tsar - ti sa atali

In the month Chisleu the observation of an eclipse

7. tarbatsu sa Samsi il - mu - u

(and) the disappearance of the Sun came on (לוה)

8. u sin sa it - ba - lu

and the Moon which had disappeared

9. a - na ma - tsar - ti atali

after the observation of the eclipse

10. ana arakh Cuzalla in - nam - mar

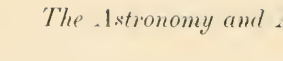
during the month Chisleu is seen.

11. śarru lu - nah - ud

May the king be glorious:

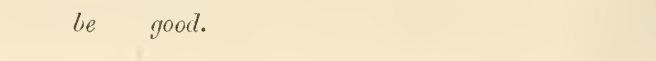
12. lib - bi sa śarri bil - ya

May the heart of the king, my lord,

13. 

lu - dha - a - bi

be good.

14. 

sa D.P. Khu - si - ilu abdu sa śarri lim - u

(*Report*) *of Khusil the servant of the king, the eponyme.*

W.A.I. 59, 2:—

1. "The Moon set (*tarbatsa ipakhkhir*) and Mercury in its place is fixed.
2. Military invasion of Phœnicia.
3. *Or* there is corn and there is no work (*ubbusu*).
4. . . . . Accad returns. The day is clear.
5. The Moon makes a river (*nahra ipakhkhir*). Verdure *of plants* (?) (*urcitu seśinu*)
6. in the country is.
7. *Or* rain falls.
8. The star of Merodach sets, and
9. the star of Merodach rose again (*miskhu imsukh*).
11. The star of Merodach Jupiter
12. to its fixed position causes to return (*ana manzazi-su yusatar*), and
13. increases (*isakar*, שגא), and
14. behind it (on) the fourteenth day . . . .
15. (Report) of Ba(laśi)."

W.A.I. 59, 5:—

1. "In the month Adar, the fourteenth day the Moon makes an eclipse.
2. In the month Adar, the fourteenth day, in the evening watch, an eclipse
3. the Moon makes; and his crown to the king of the land (is) propitious.
4. Ur and Phœnicia he is given.
5. During the eclipse of the Moon, Mercury and Venus (were not visible).

6. In the month Adar the Moon is eclipsed. The king of Elam . . . .
7. The month Adar the Moon is eclipsed in the evening watch.
8. The month Adar from the first day (to the . . . .)
9. the life of the king hostility (suffers).
10. If to peace (*summa ana sallima*) the king forms his city and people,
11. during the year a flood descends and great waters prevail.
12. When the Moon has made (*lit.* raised, *issunu*) an eclipse, the king dwells quietly (*ilan*, [illegible]), and
13. for a long time (*ana erikta*) good the king to the princes in Accad
14. will decree, and hostility *no one* (?)
15. will bring about.
16. (Report) of Nergal-edir."

W.A.I. 59, 6:—

1. The Moon sets, and the star of the King
2. in its place is fixed. During this year
3. women male children
4. beget.
5. (Report) of Nergal-edir."

W.A.I. 59, 7:—

1. "The Moon a dark setting makes.
2. For a month rain is prevented (*yucala*), and clouds
3. are kept away (*yuctatsara*).
4. The Moon sets and Mars
5. in its place is fixed. Scattering of cattle.
6. (Phœnicia) is reduced.
7. The Moon sets, and the star of the King
8. in its place is fixed. During this year no pregnant women
9. bear male children.
10. (Report of Nebo)-akhi-erba."

W.A.I. 59, 8 :—

1. "When a misty (*śi'amu*) cloud in the sky
2. is lifted up (*ittanassi'* 𒀀𒀀), during the day the wind blows.
3. (Report) of Nebo-akhi-erba."

W.A.I. 59, 12 :—

1. "The Moon set, and
2. the star of Anu a halo in its place makes.
3. A . . . . in the country of the desert.
4. (The star Tir-) anna in the place where the Moon set
5. is fixed; and
6. for two days omens *of prosperity* (?)
7. in the place where the Moon set are observed.
8. (Report) of Nebo-akhi-erba."

W.A.I. 58, 8 :—

1. "The Moon in the month Tammuz, the . . . . . the day . . . .
2. The fourteenth day in the place of the Sun it is seen.
3. An eclipse it causes to pass (*yusetac*), and makes."

W.A.I. 54, 1 :—

The first lines of this tablet are destroyed.

6. "The Moon sets and the Sun in the place where the Moon sets is fixed.
7. In all the country justice they decree.
8. The son with his father justice decrees.
9. Peace among multitudes.
10. The Moon sets, and Mars in its place is fixed.
11. Division of cattle in the whole country.
12. Its corn (and) garden-stuff (are) not flourishing,
13. and the land of Phœnicia is reduced.
14. The Moon sets and two stars in the place
15. where the Moon set are fixed. A life of long days.
16. Mars and the planet (Jupiter) are visible and fixed.
17. A prosperous revenue from the land.
18. Mars . . . . is fixed.
20. (Report) of (Sum)ai."

W.A.I. 54, 5 :—

1. "This (is) the darkness. The Moon sets (and)
2. Mercury and the star of the Double Sword (appear) in its place.
3. The Moon sets and Mercury in its place is fixed.
4. The king of Accad returns home (*yutaśar*).
5. The Moon sets, and the god *Nibiru* in its place is fixed.
6. The troops divide the cattle in the desert.
7. The star of Merodach at its appearance Mercury
8. (for) . . . . *caspu* (space of two hours) increases in size (*isakka*), and Mercury
9. in the midst of heaven is fixed, and Nibiru.
10. The Moon sets and the star of the Double Sword in its place is fixed.
11. The Queen of the Gods . . . . . the men of the desert are scattered.
12. Men lions kill and crocodiles enter the land.
13. This (is) what is recorded (*izzacar* [illegible]).
14. The Moon sets and Mercury in its place is fixed.
15. The king of Phœnicia falls and an overthrow of the country his enemy makes.
16. This (is) the report (*akhi'a*)
17. of Nebo-musetsi."

W.A.I. 54, 6 :—

1. "The Moon out of its reckoned time is present (*ikhkhira*) and is not seen.
2. Campaigns against many cities (*tibe al cissati*).
3. The fifteenth day it grows in size (*irabbi*), and the sixteenth day with the Sun it is seen.
4. Mars (and) the planet (Jupiter) *together* (?) (*iśśana*) are present. Corn is dug up.
5. The star of the Bird Urakhga the path of the Sun attains. *Ganzu* is reduced.
6. For the second time (*sanis*) a *ricmu* is made.
7. This (is) the news (*dibbi*) for Accad.
8. Mars . . . . . Saturn
9. . . . . .

10. The number that was wanting (*mīnu khidhdhu*) . . . . . I made.
11. The Moon the sixteenth day is seen. The king of Śubarti is strong; and
12. a rival has not (*makhira la irassi*).
13. The Moon sets and the planet (Jupiter) in its place is fixed.
14. . . . . appear.
15. The Moon sets and Mars in its place is fixed.
16. Division of cattle. There is justice ( ). The desert again is reduced.
17. Its corn and garden-stuff do not flourish, and the land of Phœnicia is reduced.
18. The Moon sets, and the star Icu in its place is fixed.
19. No rising of corn.
20. The star Icu, the star of the Gate.
21. (Report) of Balaśi.
22. Mars in this place . . . . .
23. . . . . Saturn.
24. In the month Nisan, the day is complete (*yusallam*)."

Records of eclipses for every day in the year were kept, which shows how frequently the Calendar must have been out of order. Thus we have a table of the events resulting from eclipses upon each day of the month Tammuz up to the middle of the month.

W.A.I. III, 56, 1 :—

1. "On the first day if there is an eclipse, and it begins in the south,[1] and (there is) light (*nuru*), a great king (will die).
2. In the month Tammuz, the second day, an eclipse happens, and in the north it begins, and (there is) light, king with king (fights?).

[1] Literally, "in the first point of the compass" ( ). The order of the cardinal points was south, north, east, and west, according to W.A.I. II, 29, 1–4.

3. In Tammuz, the third day an eclipse happens, and in the east it begins, and (there is) light, rains and floods (descend).
4. In Tammuz, the fourth day, an eclipse happens, and in the west it begins, and (there is) light, in Phœnicia the crops (flourish ?).
5. In Tammuz, the fifth day, an eclipse happens, and the Great Star is ascendant, famine is in the land.
6. In Tammuz, the sixth day, an eclipse happens, and (it is) white, the Moon (receives) prayers (*icribi*).
7. In Tammuz, the seventh day, an eclipse happens, and (it is) black, the Moon (sends) food (*zinuti*) to Phœnicia.
8. In Tammuz, the eighth day, an eclipse happens, and (it is) dark-blue, a plot of ground and field (are sold ?).
9. In Tammuz, the ninth day, an eclipse happens, and (it is) greenish-yellow, (there results) spoiling of the enemy's country.
10. In Tammuz, the tenth day, an eclipse happens, and (it is) pale-yellow (𒀭𒀭𒀭), Accad *ganzu* (is reduced ?)
11. In Tammuz, the eleventh day, an eclipse happens, and (the Sun) the lord of light (𒀭𒀭𒀭) goes his way, the treasure of the country (is despoiled).
12. In Tammuz, the twelfth day an eclipse happens, and the watch ended (𒀭𒀭𒀭𒀭𒀭) (*yustanikh*) . . . .
13. In Tammuz, the thirteenth day, an eclipse happens, and southward moves . . . . . .
14. In Tammuz, the fourteenth day, an eclipse happens, and northward moves.
15. In Tammuz, the fifteenth day, an eclipse happens, and eastward moves . . . ."

Provision was even made for an unexpected eclipse. Thus (in III, 55, 16), it is said that "if in the month Tammuz an eclipse happens which has not been calculated, the heart is established (𒁹𒁹)." Immediately before this a general prediction is hazarded as to what might be expected

from an eclipse in this month: "In Tammuz, from the first to the thirtieth day, (if) an eclipse happen, the altars are destroyed (), the cities are reduced, and to peace the king (inclines) not."

The next two tablets which I shall quote refer exclusively to the Sun. Unfortunately the opening lines are lost, but what is left runs thus:—

W.A.I. III, 59, 14:—

1. "The Sun rose (*ippukha*) and before it was a . . . .
2. The king of multitudes lengthens his life.
3. In the month Adar, the Sun in *serim* goes to rest (*tarbatsa ipakhkhir*). During the same month ()
4. floods descend, and the sky rains.
5. In the midst with Mercury it (is).
6. (There is) a favourable breeze (*rikhti dhibbi*)
7. when (the Sun) (is) with it, and
8. it portends rains and flood."

W.A.I. 59, 15, Obverse:—

1. "The Sun in its size sets double (). A threefold dark-blue (is) (its) light. The king of the land is divided.
2. The Sun in its size is enlarged (). Fourfold are its colours ().
3. A fourfold increase . . . . . ."

Reverse:—

1. "The Sun at setting among the stars goes down (*išakhkhip*). The king . . . .
2. The Sun in full size sets and Jupiter . . . .
3. The Sun sets (), and draws water.[1]
4. An eclipse of the Sun takes place and it draws water.
5. The Sun sets and in its place (*manzazi*) the Moon is fixed. The land . . . .

[1] Literally, "the water of the Sun is collected," *me Samsātuv ippakhkharu* .

6. During the eclipse of the Sun (the Moon . . . .)
7. The Sun sets and in its place the star Mar-buda is fixed.
8. During the eclipse of the Sun (the Moon . . . .).
9. The Sun sets and in its place the planet Dapinu is fixed.
10. During the eclipse of the Sun (the Moon . . . .).
11. The Sun sets and in its place the star *Khabatsi* (Entena-maslum) is fixed.
12. In the month Tisri, the Sun is eclipsed.
13. The Sun sets and in its place the star of the Left-hand ([cuneiform]) is fixed . . . .
14. The Sun sets and in its place the star of the Double Sword is fixed.
15. In the month Nisan the country of the king endures. (It is) fortunate.
16. According to the words of a tablet no longer existing, beginning (as above).
17. The palace of Assur-bani-pal king (of Assyria)."

The disappearance of the stars also was noticed. Thus we have a tablet relating to the star called "the Great Lion" ([cuneiform]), the first two lines of which are too much broken to admit of translation, but which then goes on as follows :—

W.A.I. III, 59, 13 :—

3. "The star of the Great Lion (is) dark.
4. The heart of the land is not good.
5. The star of the King (is) dark.
6. Rule (*muhirra*) (in) the palace of the master.
7. (Report) of Nebo-musetsi."

The appearance of the Moon's crescents, or of a halo round its body, were supposed to forbode many occurrences. It may be worth while to quote some of the inscriptions which bear upon this subject.

W.A.I. III, 58, 3 :—

1. "The Moon at its appearance put on a halo (*lit.* a crown) (*agu ippir* [cuneiform]).

2. The king to supremacy goes.
3. On high he sits (*nā-bur-ris yus-sab*).
4. (The Moon at) its appearance (*namuri-su*) put on a halo, and
5. the Moon at its appearance, its right horn ([cuneiform]) the sky . . . .
6. The tariff (is) firm. In the land (is peace ?)
7. Production (*naṣcun*) of corn in Phœnicia.
8. On its right horn the sky (is dark ?).
9. . . . . (which) they had called,
10. in the sky covered (*ikhallup*), and was not *visible* (?).
11. A dark cloud covered the horn.
12. The Moon at its appearance, its right horn (was towards) Phœnicia.
13. The Moon the first day is seen, and Accad is prosperous.
14. (There is) a numbering of Elam and of the aforesaid Phœnicia.
15. The Moon, the fourteenth day in the place of the Sun
16. is seen.
17. (Report) of Nebo-akhi-erba."

W.A.I. III, 51, 5:—

1. "The Moon the first day is seen.
2. The face (is) steadfast, the heart of the country good.
3. The day according to calculation is long (*eric*).
4. A life of long days.
5. That night (*musu anniu* [cuneiform])
6. rains descended (*rībi erubu*).
7. In the month Tebet rain descended (*erub* [cuneiform]).
8. The king in the city of his enemy sits (*yusab* [cuneiform]).
9. In the month Tebet down (*saplu* [cuneiform]) it descended.
10. The palace of the prince is overwhelmed and the ruins go to destruction.
11. During the night down it descended.
12. During the day . . . .
13. (Report) of the chief astronomer."

W.A.I. III, 51, 6 :—

1. "The Moon the first day is seen. The face (is) steadfast.
2. The heart of the land (is) good.
3. The Moon at its appearance wore a halo.
4. The king went to supremacy.
5. The Moon at its appearance has its right horn long, and its left horn is clear (*ikka*).
6. The king of the land *supremacy* (?) his right hand obtains.
7. The Moon at its appearance is very large (*marab irabbi*).
8. An eclipse happens.
9. The Moon at its appearanee is very *large* (?).
10. The crops of the land flourish.
11. The day according to calculation is long.
12. Lives of long days.
13. The thirtieth day is complete (*yusallam*), and
14. in the month Elul the Moon of Elam
15. makes an eclipse.
16. (Report) of Merodach . . . ."

W.A.I. III, 51, 7 :—

1. The Moon departed (*ezib* [illegible]) and in the evening (*barari*)[1] suffered (*ittakśi*)
2. an eclipse. The king of Accad
3. (is) overshadowed.
4. Out of its calculated time (*ina la* (*a*)*danni-su*) the twelfth and thirteenth days it suffered eclipse, and
5. in the evening watch the eclipse took place, and
6. the eclipse crossed on its right ([illegible]). Thereupon there failed the view of its centre (*nin-nu ezib a-ma-ru libbi-sa* [illegible]).

[1] This is borrowed from the Accadian *bara* ([illegible]) which is interpreted *sutruru* "covered." It gave its name to the evening watch. In line 3 of this tablet, we are told that *bara* might be read *balā* (? = *balum*, Heb. בל, "lacking") or *bari;* and *adannu* "a season," more especially "the season of evening," is given as its synonyme.

7. Afterwards (*ullanummu*) on its right the eclipse takes place. and
8. the whole of it (*gab-bi-sa*) obscures (*ir-khap*); and
9. the eclipse on its right *settles* (?).[1] Thereupon (there fails)
10. the view of its centre.
11. On its right the eclipse (is completed).
12. The eclipse (on) its right cuts off (*inacciś*) the view of its centre.
13. On its right the eclipse (is completed)."

Here the tablet is broken off.

W.A.I. III, 51, 3 :—

1. "The Moon in the month Ve-adar at its appearance
2. in enclosures ( ) is fixed. (The country is) under (*supil*)
3. a strong prince and the land is in want (*ikhaśśikh*).
4. (It is) extended (*pasisu*).
5. The Moon at its appearance wears a halo.
6. The king to supremacy goes.
7. The Moon the first day is seen. The face (is) firm.
8. The heart of the land (is) good.
9. The Moon its firm *position* (?) (*eudut-su cinu*) fixes.
10. Smiting (*uccu'u*) of rain.
11. In the month Ve-adar, the fourteenth day
12. the Moon with the Sun is seen.
13. (Report) of Nergal-edir."

W.A.I. III, 51, 2 :—

1. "The Moon at its appearance as the first day (so) the twenty-eighth day is seen.
2. Evil to Phœnicia.
3. The Moon the twenty-eighth day is seen.
4. Prosperity to Accad. evil to Phœnicia.
5. (Report) of the chief astronomer."

[1] The first character is lost, but the two following (*da-rum*) signify "a dwelling."

The "chief astronomer"—the astronomer royal, as we should term him—is called [illegible] "chief of the *abi*." The word *aba* is of Accadian extraction, and is formed from the Accadian *ab* "month" by postfixing the relative ending *a*, so that the name literally signifies "he that has to do with the month." It is clear that *ab* "the month" has the same source as *ai* "the Moon," *b* being a common suffix in Accadian. Now the office was a very old one. In a list of court officials (W.A.I. II, 31, 65) the *aba mat Armai* or "the astronomer of the Accadians" follows the *aba mat Assurai* or "astronomer of the Assyrians." Accad was called *Uru-ma* or *Ur-ma* "Ur-land," from its ancient capital Uri or Ur. Every Babylonian temple had its *ziggurrat* or "tower," on the top of which was erected the altar of the deity, since the gods were supposed not to condescend to come down so low as the plains. In this plainly appear the religious notions of a mountainous people, such as the Accadians originally were; and it is noticeable that the peak on which the ark of Tamzi is said to have rested is called the *ziggurrat* of the mountain of Nizir. Here was built the first altar of the regenerated world, and from this cradle of population and civilisation the first astronomer could watch the rising and the setting of the heavenly bodies. Observatories were to be found in all the great cities of Chaldea, and though there might be but one "astronomer royal" in the empire, there were several official astronomers in a subordinate capacity, who were required to send in their monthly reports to the king. Such, at least, was the case in Assyria, where there were imperial observatories, not only at Nineveh, but also at Assur and Arbela. We still possess many of the reports, mostly belonging to the reign of Assur-bani-pal; and the following will serve as specimens of the rest.

W.A.I. III, 51, 1:—

1. "The sixth day of Niśan.
2. the day and the night
3. were balanced (*i.e.*, equal *sitkulu*).
4. (There were) six *kaspu* of day
5. (and) six *kaspu* of night.

6. May Nebo and Merodach
7. to the king my lord
8. approach (*licrubu*)."

W.A.I. III, 51, 2 :—

1. "The fifteenth day of Niśan
2. the day and the night
3. were balanced.
4. There were six *kaspu* of day
5. (and) six *kaspu* of night.
6. May Nebo and Merodach to the king
7. my lord
8. approach."

W.A.I. III, 51, 3 :—

1. "A watch we observe (*ma-tsar-tu ni-it-ta-tsar*).
2. The twenty-ninth day the Moon
3. we see (*ni-ta-mar*).
4. May Nebo and Merodach
5. to the king my lord
6. approach.
7. (Report) of Nabūa
8. of the city of Assur ([cuneiform])."

W.A.I. III, 51, 4 :—

1. "The twenty-ninth day
2. a watch we keep.
3. The Moon we did not see (*la nimur*).
4. May Nebo and Merodach
5. to the king my lord
6. approach.
7. (Report) of Nabūa
8. of Assur."

W.A.I. III, 51, 5 :—

1. "To the king my lord,
2. thy servant (*ebed-ca* [cuneiform]) Istar-(iddin-pal),
3. one of the chiefs (*rabute*),
4. of Arbela.
5. May there be peace (*lū sallimmu*)

6. to the king my lord.
7. May Nebo (and) Merodach
8. (and) Istar of Arbela
9. to the king my lord
10. approach.
11. On the twenty-ninth day
12. a watch
13. we keep.
14. The Moon we saw not.
15. In the month Tammuz, the second day
16. during the eponymy of Bil-sunu [B.C. 647][1]
17. prefect of the city of Khindana."

W.A.I. III, 51. 6:—

1. "To the king my lord
2. thy servant Istar-iddin-pal
3. one of the chiefs
4. of the astronomers.
5. of Arbela.
6. May there be peace
7. to the king my lord.
8. May Nebo, Merodach
9. (and) Istar of Arbela.
10. to the king my lord
11. approach.
12. On the twenty-ninth day
13. a watch
14. we keep.
15. The observatory[2]
16. was covered with cloud ( ).
17. The Moon we did not see.
18. The month Sebat, the first day,
19. the eponomy of Bel-kharran-sadūa."[3]

[1] This is Mr. Smith's date. Bel-sunu was Eponyme in the latter part of Assur-bani-pal's reign.

[2] Literally "house of observation" *bit tamarti* .

[3] Bel-kharran-sadria's Eponymy fell during the reign of Assur-bani-pal. Mr. Smith places it in B.C. 649.

W.A.I. III. 51, 7 :—

1. "To the chief governor[1] my lord
2. thy servant Nebo-sum-iddin,
3. one of the chiefs,
4. of Nineveh.
5. May Nebo (and) Merodach
6. to the chief governor
7. my lord approach.
8. The fourteenth day a watch
9. for the Moon
10. we keep.
11. The Moon an eclipse
12. suffers.[2]

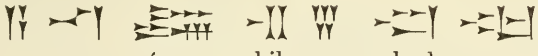
W.A.I. III, 53, 3 :—

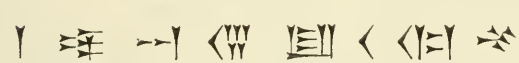
1. "To the king (my lord)
2. thy servant Rimmon . . . .
3. May there be peace to the king (my lord).
4. May Assur, the Moon-god, the Sun-god, (Nebo, and Merodach)
5. the great gods of heaven (and earth)
6. to the king my lord
7. for ever and ever be propitious (*adannis adannis lierubu*).
8. The Moon the thirtieth day
9. I saw (*atamar*). Such (is) the report (𒀀𒈬𒌋𒌋)
10. of the thirtieth day.
11. In accordance with (*ina pi itti*) what (is) the report
12. when (*eī sa*) the second day
13. it is fixed
14. so (*summa*) before the king my lord
15. it is visible (*makhir*).
16. Before the city of Assur

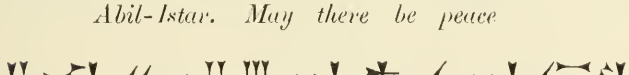
[1] Literally "the man of the foundation" or "of buildings" (𒈬𒄭𒄭𒄭 𒁹𒄭𒄭𒄭

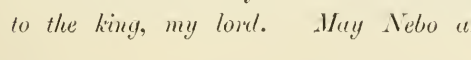
17. may the king trust (*lid-gul* [illegible])
18. the *omens* (?) (*kha-ra-mi*), and
19. may the king my lord during the day
20. fix (*lucin*)
21. the *iśsuri*. O king my lord
22. the country (*mātā*) thou (*at-ta*)
23. didst not (*la tapru* . . . . .)."

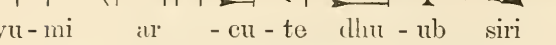
The rest of the inscription is too mutilated for translation. The first characters only of the last seven lines are left, the first beginning with *anacu* (*bit-namarti*) "I the observatory." Another report, lithographed in W.A.I. III, 51, 9, is happily better preserved. M. Oppert has already given a translation of it in the Jour. Asiatique, 1871 (xviii, 67). A solar eclipse was expected, but did not take place, and the appearance of the new Moon marked the beginning of the month Tammuz. The report seems to have been handed in to Assur-bani-pal, and it is interesting to find that at that time astronomical science was sufficiently advanced to be able to venture on the prognostication of a solar eclipse, even though the calculations did not invariably turn out to have been accurate.

1. 
a - na śarra bil - ya ebed - ca
To the king my lord thy servant

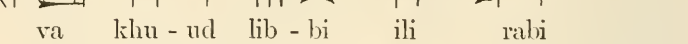
2. 
D.P. Abil - D.P. Istar lu - u - sallim - mu
Abil-Istar. May there be peace

3. 
a - na śarra bil - ya D.P. Nabiu û D.P. Maruduc
to the king, my lord. May Nebo and Merodach

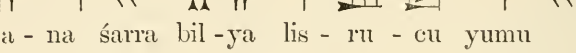
4. 
a - na śarra bil - ya lic - ru - bu
to the king, my lord, be propitious.

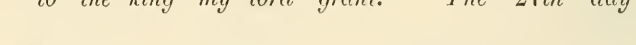
5. 
yu-mi ar -cu-te dhu-ub siri
Long days, soundness of flesh

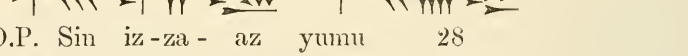
6.
va khu-ud lib-bi ili rabi
and joy of heart may the great gods

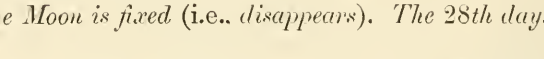
7. 
a-na śarra bil-ya lis-ru-cu yumu 27
to the king my lord grant. The 27th day

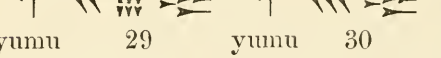
8.
D.P. Sin iz-za-az yumu 28
the Moon is fixed (i.e., *disappears*). *The 28th day,*

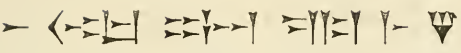
9. 
yumu 29 yumu 30 ma-tsar-tav
the 29th day, (*and*) *the 30th day, a watch*

10. 
sa atal D.P. Samsi ni-it-ta-tsar
for an eclipse of the Sun we keep.

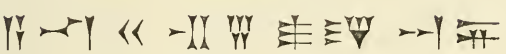
11. 
Sam-śi ti-ic atala la is-cun
The Sun behind the eclipse did not pass.

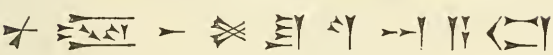
12. 
yumu 1 D.P. Sin na-mur yu-mu
(*On*) *the 1st day the Moon is seen in the day-time.*

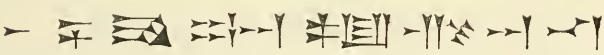
13. 
sa ąrakh Duzu cu-u-nu
During the month Tammuz current

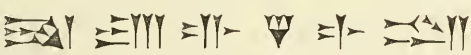
14. 
ina eli cacab Sak - vi - sa
above *Mercury*

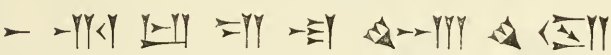
15.
sa ina pa - ni - ti
of which already

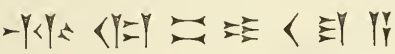
16. 
a - na śarra bil - ya as - pur an - ni
to the king my lord I have sent this[1]

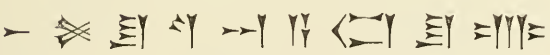
17. 
nu - uc' ina cas - su - ud D.P. A - nuv
account. During the period when the Moon is Anu,[2]

18. 
ina gag - gar cacab Sib - zi - an - na
in the orbit of the star the Shepherd of the Heavenly Flock,

19. 
it - ta - mar sa - pi - il
it is seen declining.

20. 
ina ri - ib karnu la ikh - khi - rav
Owing to rain the horn was not visible

21. 
ic - di - bi - i u-ma-a
very clearly (?). Thus

22. 
ina cas - su - ud D.P. A - nuv su - u
during the period when the Moon is Anu aforesaid

[1] *i.e.*, a "special."

[2] From the 1st to the 5th day.

23. pi - khir -su a - na śarra bil - ya
as (regards) its conjunction to the king my lord

24. a - sap - ra u -ma-a
I am sending. Thus

25. id - dan - ta -kh'a it -takh- rav
it extended itself and was visible

26. sap - la cacab Rucubi
below the star of the Chariot ;

27. ina cas-su -ud D.P. Bili iz - za - az
during the period when the Moon is Bel[1] *it is fixed ;*

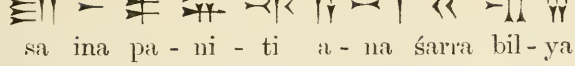
28. a- na cacab Rucubi lu -u- ic - ri - im
round the star of the Chariot it circled.

29. pi - khir -su uc - ta - ta - la -va
Its conjunction was prevented ; but

30. va pi - khir -su sa cacab Sak -vi- sa
nevertheless its conjunction with Mercury

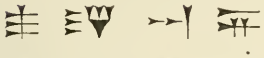
31. sa ina cas - su -ud D.P. A - nuv
which (took place) during the period when the Moon is Anu.

[1] From the 10th to the 15th day.

32. 

sa ina pa - ni - ti a - na śarra bil - ya

of which already to the king my lord

33. 

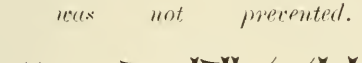
as - pur an - ni

I sent this (account),

34.

la uc - ta - ta - la

was not prevented.

35. 

śarru bil - i lu - u-sallim

May the king my lord have peace.

The reports quoted above which refer to the vernal equinox, establish the fact that that period of the year corresponded with Aries. The Accadian Calendar was arranged so as to suit the order of the Zodiacal signs: and Nišan, the first month, answered to the first Zodiacal sign. Now the Sun still entered the first point of Aries at the vernal equinox in the time of Hipparkhus, and it would have done so since 2540 B.C. From that epoch backwards to 4698 B.C. Taurus, the second sign of the Accadian Zodiac and the second month of the Accadian year, would have introduced the spring. The precession of the equinoxes thus enables us to fix the extreme limit of the antiquity of the ancient Babylonian Calendar, and of the origin of the Zodiacal signs in that country.

It is difficult to say when the Assyrians borrowed the Calendar of their Accadian neighbours. Like the Jews, who possessed a native Calendar before the Babylonian Captivity, with months called Bul, Ziv, and Ethanim, the Assyrians certainly had originally one of their own. The native names of some of the months have been preserved. Thus Sargon terms Sivan the "royal month" (*arakh śarri*), and Rimmon-nirari the son of Pudil (in B.C. 1320) dates the

monolith which Mr. Smith brought from Assyria in the month *mukhur-ili* "the gift of the gods." The borrowed Calendar must have come to them through the medium of the Aramæans, just as it came to the Jews, since the names of the months Niśan, Iyyar, &c., are not Accadian on the one hand, nor are they Assyrian on the other. The uncertainty of the spelling of many of them, *Cuzallu*, or *Ciśilivu*, *Śivanu* or *Tsīvan*, for instance, proves the latter point as much as the peculiar name of the eighth month proves the former. The Aramæo-Accadian Calendar, however, was in use among the Assyrians at least as early as the reign of Tiglath-Pileser I; and so a new light is thrown upon the culture and relations of the Aramæan tribes in the opening days of the Assyrian Monarchy.

Along with the establishment of a Calendar came the settled division of the day and night. The old rough division of the night into three watches, which we find also in the Old Testament, remained long in use; but although the astrological works of Sargon's Library do not know of any other reckoning of time, it was gradually superseded by a more accurate system. This was by *kasbu* or *kasbumu* (𒆳𒀭𒀭 or 𒆳𒀭𒀭𒄭) in Accadian, *asli* in Assyrian.[1] M. Oppert connects *aslu* with the Aram. אשל, "cord," Arab. اشل "a measure of Bassora of 60 cubits"; and the word was certainly transferred from ground-measure to time-measure. The *casbu* was equal to two of our hours, and was divided into 60 degrees.

And so we break off where we began, with the division of time. Babylonian astronomy may have been rude and superstitious; it may have had little that we hold to be scientific in it; but so also was the alchemy of the middle ages. And just as out of the alchemy of our forefathers has arisen chemistry, so out of the astrology of Chaldea came not only the observations which rendered possible the astronomy of Greece and modern Europe, but also the formation of a Calendar; and this one practical discovery—for discovery it was—is sufficient to secure to the star-gazers of Accad the respect and gratitude of succeeding generations.

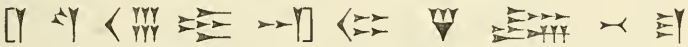
[1] W.A.I. III, 29, E, 20.

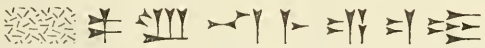
APPENDIX.

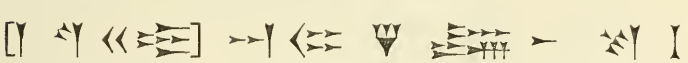
Table of Portents (W.A.I. III, 60)—Obverse.

Col. 1. First five lines lost. Of the six following lines only the ends remain:—(6) "service," (7) "hand and face," (8) "of king of Elam," (9) "to his men," (10) "his years," (11) "the cattle divided."

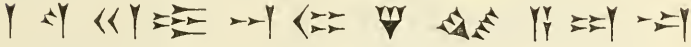
Then the tablet proceeds:—

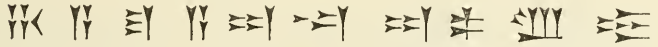
12. 
yumu 16 atalu issacan sarru inat-va
On the 16th day an eclipse takes place. The king dies, and

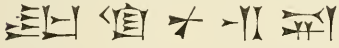

[ap]-pa-ru na-mi-e ikhagilu
the marches the streams irrigate.

13. 
yumu 20 atalu issacan sarru ina cuśśa-su
On the 20th day an eclipse happens. The king on his throne

iddut-va man-ma ina cuśśu itstsa-bat
is slain, and a nobody on the throne seizes.

14. 
yumu 21 atalu issacan . . . . marrati
On the 21st day an eclipse happens. The waves (?) of the sea

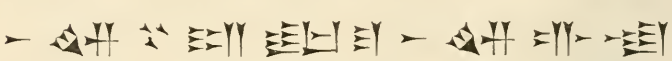

ippalagat-va marratu ap-pa-ru khigalla
are divided, and the sea the marshes (and) canals


ircits itti nu-khu-us
inundates with fertility.

15.

ina arkhi Sivanu yumu 14 atalu issacan-va

In the month Sivan, on the 14th day, an eclipse happens, and

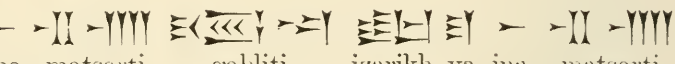


ina rukhi sadu izarikh-va ina rukhi akharru

in the east it begins, and in the west

igadh[1]

it ends.

16. 

ina matsarti gabliti izarikh-va ina matsarti

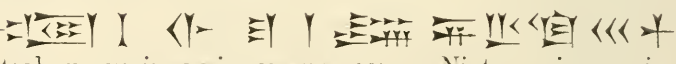
In the night watch it begins and in the morning watch

satturri[2] igadh rukhu sadu ina idi[3]

it ends. Eastward (at the time of

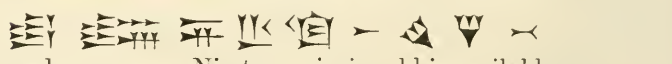
pi erib

appearance (and) cessation)

17. 

tsalmu -su innamir-va ana sar Ni-tuc- ci uzzi

its shadow is seen: and to the king of Dilmun the crown



innadan sar Ni-tuc- ci ina khi-sa ilabbar

is given. The king of Dilmun with the crown[4] grows old.

[1] is explained by *gudhu*, a word of Accadian origin, signifying "end."

[2] The Accadian *par zal-li* or *par zal-la* is literally "day" or "light becoming." The Assyrian *satturru* (W.A.I. II, 39, 13.) may be for *sad'urri* "lord of light." *Gablitu* "middle" is a translation of the Accadian *de-ba*. The evening watch was called *bararitu* in Assyrian, *an-ta* "upper" (*i.e.* "first") or *an-dhur* in Accadian.

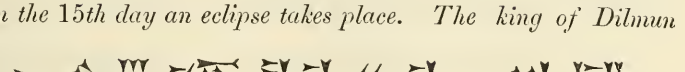
[3] *Idi* or *idat* may also mean "omens."

[4] *Khi-i-suv* is given as a synonyme of *agu* "crown" in II. 25, 17.

18.

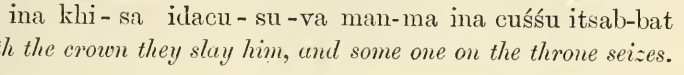
yumu 15 atalu issacan sar Ni - tuc - ci

On the 15*th day an eclipse takes place. The king of Dilmun*



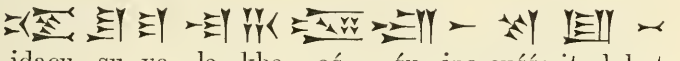
ina khi - sa idacu - su - va man-ma ina cuśśu itsab-bat

with the crown they slay him, and some one on the throne seizes.

19. 

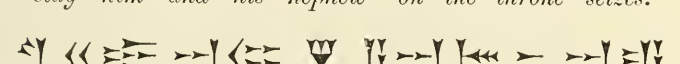
yumu 16 atalu issacan sar na - du - su

On the 16*th day an eclipse takes place. The king his eunuchs*[1]



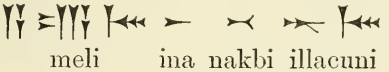
idacu - su - va la - kha - aś - śu ina cuśśa itsab-bat

slay him and his nephew[2] *on the throne seizes.*

20. 

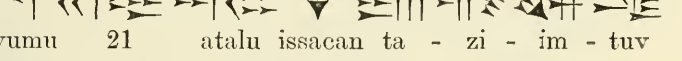
yumu 20 atalu issacan zunni ina sami

On the 20*th day an eclipse happens. Rains in heaven;*



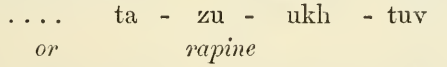
meli ina nakbi illacuni

floods in the channels flow.

21. 

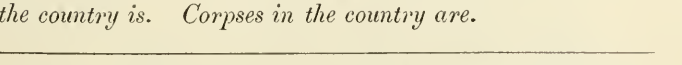
yumu 21 atalu issacan ta - zi - im - tuv

On the 21*st day, an eclipse takes place. Devastation*



. . . . ta - zu - ukh - tuv

or rapine

22. 

ina mati ibassi pagri ina mati ibassu

in the country is. Corpses in the country are.

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[1] *Nadu* is a synonyme of *nacartuv*, *adu*, and *aru* "an eunuch" in II, 25, 2.

[2] I scarcely think this translation can be supported. I should prefer "an uneducated one," "a plebeian," from the negative *la* and *khaśaśu* "intelligent."

23. Ina arkhi Dūzu yumu 14 atalu issacan - va
In the month Tammuz on the 14th day an eclipse happens, and

ina rukhi akharri izarrikh-va ina rukhi sūti
in the west it begins and in the south

itti rukhi iltani
and north

24. igadh ina matsarti barariti izarrikh - va ina
it ends; in the evening watch it begins and in

matsarti gabliti igadh rukh akharri ina
the night watch it ends. Westward at the

idi pi erib
time of appearance [and] disappearance

25. tsalmu - su innamar-va ana sar gu - ti - i
its shadow is seen; and to the king of Gutium

uzzu innadan
a crown is given.

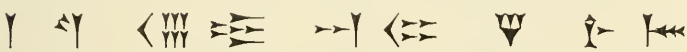
26. ru - tim Gu - ti - i ina tuculti ibassu
The forces of Gutium in service are;

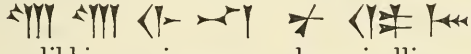
mi - ic - nu - us sa id - di
submission of the troops.

27.
yumu 15 atalu issacan zunni ina sami
On the 15th day an eclipse takes place. Rains in heaven

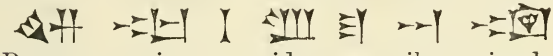
meli ina mati erubu khusukhkhu ina
floods in the land descend. Famine in

mati ibassi
the land is.

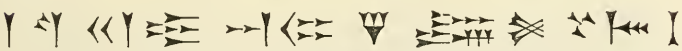
28. 
yumu 16 atalu issacan nesti
On the 16th day an eclipse takes place. Women

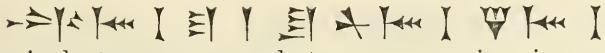

libbi - si - na la isallima
their offspring do not perfect.

29.
yumu 20 atalu issacan ina arkhi Abu D.P.
On the 20th day an eclipse happens. In the month Ab


Ramanu pi - su ida - va ilu iccal
Rimmon (the weather) his mouth sets; and the god eats.

30.
arcu sanati D.P. Ramanu pulu irakhkhits
For a year Rimmon the cattle inundates.

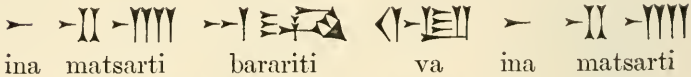
31. 
yumu 21 atalu issacan Sarru 2 mati -su
On the 21st day an eclipse happens. The king twice his lands

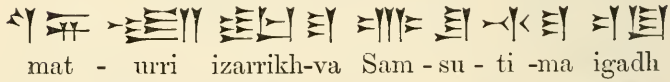

ipalcatu -su-va ana kat nacri -su isaccinu-su
revolt from him, and to the hand of his foes deliver him.

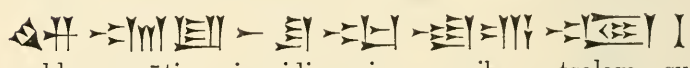
32.
Ina arkhi Abu yumu 14 atalu issacan-va
In the month Ab, the 14th day, an eclipse happens; and

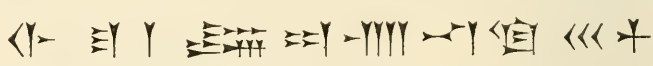
ina rukhi sūti izarrikh-va ina rukhi sadi
in the south it begins, and in the east

igadh
it ends.

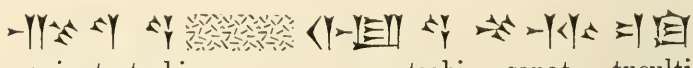
33. 
ina matsarti bararitі va ina matsarti
In the evening watch and in the morning


mat - urri izarrikh-va Sam - su - ti -ma igadh
watch it begins, and at Sun-rise it ends.

34. 
rukh sūti ina idi pi erib tsalam -su
Southward at the time of appearance (and) disappearance


innamar-va ana sar Ab - nun - na - ci uzzu
its shadow is seen; and to the king of Mullias a crown

innadan
is given.

35. 
napis -tu tsabi . . . . . va tsabi sanat tuculti
The life of the soldier . . . . and the soldiers for a year (in) battle

in - nan - dha - ru - va nisi ina tuculti
are seen; and men by arrows

idacu
are slain.

36. yumu 15 atalu issacan sarru imat-va zunni
On the 15th day an eclipse happens. The king dies; and rains

ina sami meli ina nakbi erubi iba - si
in heaven, floods in the channels descending are.

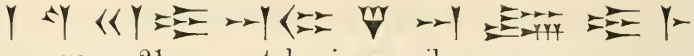
37. yumu 16 atalu issacan sar Accadi
On the 16th day an eclipse takes place. The king of Accad

imat D.P. Nergal ina mati ical
dies. Nergal (i.e., *war*) *in the country feeds.*

38. yumu 20 atalu issacan sar D.P. Kha-at - ti
On the 20th day an eclipse happens. The king of the Hittites

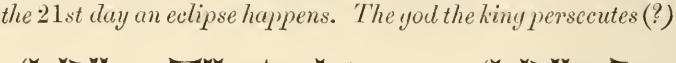
. . . . sar D.P. Kha-a - ti iballidh-va ina
or the king of the Khati lives and on the

cuśśi itsab-bat
throne seizes.

39. 

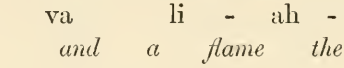
yumu 21 atalu issacan ilu sarra .....

On the 21st day an eclipse happens. The god the king persecutes (?)



va li - ah - bu mata va sarra

and a flame the land and the king



i - li - h - bu -u

will devour.

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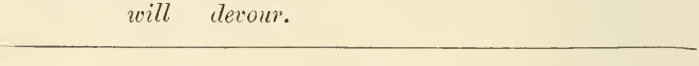
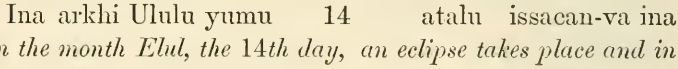
40. 

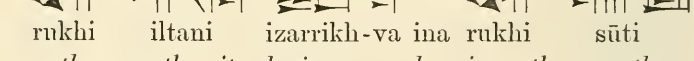
Ina arkhi Ululu yumu 14 atalu issacan-va ina

In the month Elul, the 14th day, an eclipse takes place and in



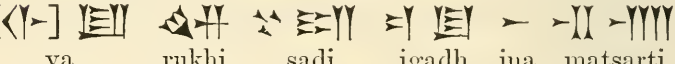
rukhi iltani izarrikh-va ina rukhi sūti

the north it begins, and in the south

41. 

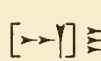
va rukhi sadi igadh ina matsarti

and the east it ends; in the evening



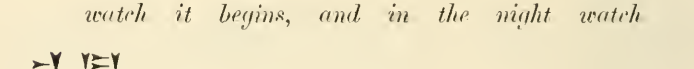
barariti izarrikh-va ina matsarti gabliti

watch it begins, and in the night watch



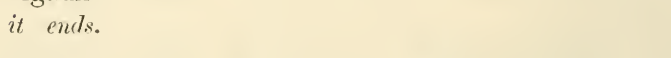
igadh

it ends.

42. 

rukh iltani ina idi pi erib tsalam -su

Northward at the time of appearance (and) disappearance its



innamar-va ana sar Ab - nun - na - ci uzzu innadan

shadow is seen; and to the king of Mullias a crown is given.

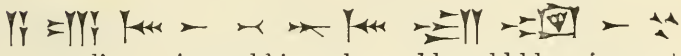
43.

ana sar khi - sa libitu - va sarra atalu

To the king the throne (is) an omen; and the king darkness

i - te - ti - ik - su zunni ina sami

passes over him. Rains in heaven,

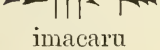
44. 

meli ina nakbi erubu khusukhkhu ina mati

floods in the channels flow. A famine in the country

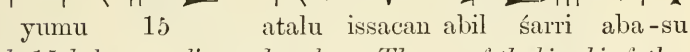
ibasi nisi abli - si - na[1] ana caśpa

is. Men their sons for silver



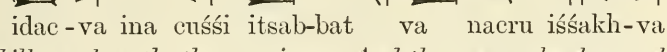
imacaru

sell.

45. 

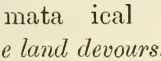
yumu 15 atalu issacan abil śarri aba - su

On the 15th day an eclipse takes place. The son of the king his father



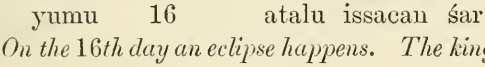
idac - va ina cuśśi itsab-bat va nacru iśśakh - va

kills, and on the throne seizes. And the enemy plunders and



mata ical

the land devours.

46. 

yumu 16 atalu issacan śar mati a - khi - ti

On the 16th day an eclipse happens. The king of another country

[1] The feminine here instead of the masculine *sunu* is a mistake not unfrequently met with in these tablets. It shows that the compilers of them were but imperfectly acquainted with Assyrian.

. . . . . śar D.P. Kha - a - ti iśśakh - va ina

or the king of the Hittites plunders, and on the

cuśśi itsab-bat

throne seizes.

47. Zunnu ina sami meli ina nakbi erubu

Rain in heaven; floods in the channels descend.

48. yumu 20 atalu issacan. Zunni ina

On the 20th day an eclipse happens. Rains in

sami meli ina nakbi erubu matu ana matu

heaven; floods in the channels flow. Country with country

i -kha- ag -va sallim - mu issacanu

keeps festival, and peace they make.

49. yumu 21 atalu issacan cuśśu nacru ul

On the 21st day an eclipse happens. The throne of the foe

yu -lab -bar śar ramanu- cinu ina mati ibass'u

lasts not. A king self-appointed in the land shall be.

50. arcu sanna D.P. Raman irakhkhits . . . śar ina

After a year Rimmon inundates; { *ditto* i.e., *after a year* } *the king on*

cuśśa ul yu - lab - bar mat - su izakhkhir

the throne does not last. His country is made small.

51. Ina arkhi Tasritu yumu 14 atalu issacan-va
In the month Tisri the 14th day, an eclipse happens; and

ina rukhi sūti izarrikh-va ina rukh
in the south it begins, and in the

sadu igadh
west it ends;

52. ina matsarti barariti izzarikh-va ina matsarti
in the evening watch it begins, and in the night

gabliti igadh rukh sūti ina idi
watch it ends. Southward at the time of

pi erib
appearance (and) disappearance

53. tsalam-su innamar-va ana śar Elami uzzu
its shadow is seen; and to the king of Elam a crown

innadan ru-tim Elami
is given. The forces of Elam

54. ina tuculti ibassi la-ta-ar-ri sallim-i
in service are. No return of peace

ana nisi-su
to his men.

55. yumu 15 atalu issacan nacru iśśakh-va
On the 15th day an eclipse happens. The foe plunders, and

sibirri mati yacal va yakhaz va mata
the corn of the land devours and seizes, and the country

yu - si - padh
tyrannizes over.

56. yumu 16 atalu issacan pal -kha-a sarru
On the 16th day an eclipse takes place. Suddenly the king

imat pulug sarrut - śu
dies. Division of his kingdom.

57. yumu 20 atalu issacan li - ah - bu mata
On the 20th day an eclipse happens. The flame the land

i - la - ah - ib erat libbi - si - na
consumes. Pregnant women their offspring

la isallima
do not perfect.

58. yumu 21 atalu issacan tib -ut itstsuri-mahduti
On the 21st day an eclipse takes place. A flight of many birds

ana mata .... ana matâti ibas - si
to a country, or to countries, happens.

Lines 59 and 60, at the beginning of Column II, are lost.

61. . . . . [na] - du - su i - duc - cu - su - va
. . . . . *his eunuchs slew him, and*

man - ma ina cuśśa itsbat
some one on the throne seized.

62. . . . . atalu issacan bi - ib - lu mati yub - ba - lu
. . . . *an eclipse happens. The heart of the land is cast down.*

nin ina zal - te
Nothing in the granaries.

63. . . . . atalu issacan ina mati nacratu . . . . nahdu
. . . . *an eclipse happens. In the land (is) hostility, or bright*

D.P. Samsu ibassi
the Sun-god is.

64. . . . . aryai in - na - dha - ru - va
. . . . . *lions appear, and*

milca mati icabbidu
the king of the country overpower.

---

65. Ina arkhi Dhabitu yumu 14 atalu issacan - va
In the month Tebet the 14*th day, an eclipse takes place ; and*

ina rukh sadi izarrikh -va ina rukh akharri
in the east it begins, and in the west

igadh
it ends.

66. ina matsarti barariti izarrikh-va ina matsarti
In the evening watch it begins, and in the night

gabliti igadh rukh sadi ina idi pi
watch it ends. Eastward at the time of appearance

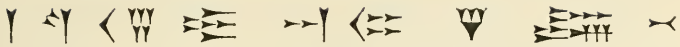
erib
(*and*) *disappearance*

67. tsalam - su innamar-va ana śar An - du - an - ci
its shadow is seen; and to the king of Assan

va Śu - zin - ci uzzu innadan
and Śubarti a crown is given;

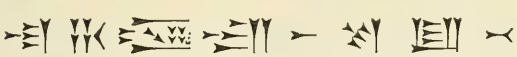
68. galli śar An - du - an - ci va
(*his*) *servants the king of Assan and*

Śu - zir - ci yus - si - padh
Śubarti causes to rule.

69. 

yumu 15 atalu issacan śarru imat

On the 15*th day an eclipse takes place. The king dies:*



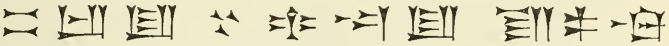
la -kha- aś - śu ina cuśśi itsab-bat

his nephew[1] *on the throne seizes.*

70.

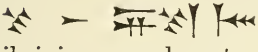
yumu 16 atalu issacan nacratu ina mati tabassi

On the 16*th day an eclipse happens. Hostility in the land is.*



bi - ib - lu mati yub - ba - lu sa -pa- ac

The heart of the land is cast down. Pouring out of



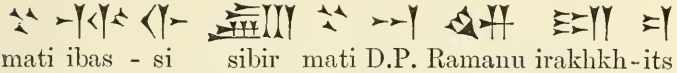
sibri ina zal - te

corn in granaries.

71.

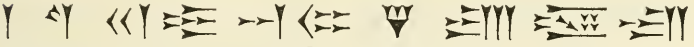
yumu 20 atalu issacan sa-kha- lam -ma[2] ina

On the 20*th day an eclipse takes place. Distress in the*



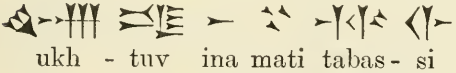
mati ibas - si sibir mati D.P. Ramanu irakhkh-its

country is. The corn of the land the Rain-god inundates.

72. 

yumu 21 atalu issacan ta - aś - śu-

On the 21*st day an eclipse happens. Plundering*



ukh - tuv ina mati tabas- si

in the country takes place.

[1] I suppose the word to be *lakhad.* It may, however, be a synonyme of *man-ma* from the negative *la* and *khas(a)su* "intelligent," meaning "uneducated," 'plebeian."

[2] *Sakhalamma,* I believe, is a shaphel derivative of חלם.

73. nascunu sakalu ina sadad- u's : pal śarri
The tariff is fixed at its highest, or the life of the king

ilabbir śar ramanu cinu ina mati ibas - si
is long. A king self-appointed in the land is.

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74. Ina arkhi yumu 14 atalu issacan-va ina
In the month Sebat, the 14th day, an eclipse takes place; and in the

rukh iltani izarrikh-va ina rukh akharri
north it begins, and in the west

igadh
it ends.

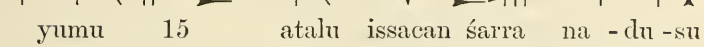
75. ina matsarti gabliti izarrikh-va ina matsarti
In the night-watch it begins, and in the morning

sadurri igadh rukh iltani ina idi pi
watch it ends. Northward at the time of appearance

76. erib tsalam - su innamar - va ana śar
(and) disappearance its shadow is seen; and to the king of

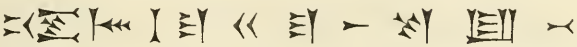
Mar - tu uzzu iddanan ru - tiv śar Mar - tu
Phœnicia a crown is given. The forces of the king of Phœnicia

ina tuculti ibass - u
in service are.

77. 

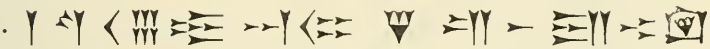
yumu 15 atalu issacan śarra na -du -su

On the 15*th day an eclipse takes place. The king his eunuchs*



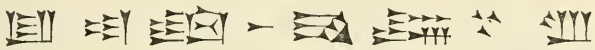
iducu -su-va man-ma ina cuśśi itsab-bat

kill him, and a nobody on the throne seizes.

78. 

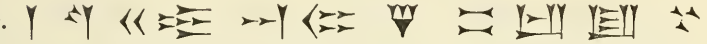
yumu 16 atalu issacan gur-ruv khusukhkhu

On the 16*th day an eclipse happens. Again famine*



itstsab- at dura ina- kar śarru mata icabbid

seizes ; the fort one undermines ; the king the land oppresses.

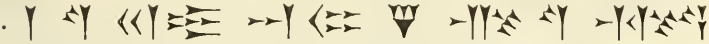
79. 

yumu 20 atalu issacan bi - ib - lu mati

On the 20*th day an eclipse happens. The heart of the country*

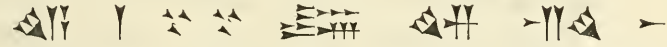
yub - ba - lu sa -pac sibri ina zal - te

is broken down. Pouring out of wheat in the granaries.

80. 

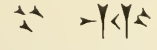
yumu 21 atalu issacan tib - ut itstsuri

On the 21*st day an eclipse takes place. Flight of many birds*



mahduti ana matati śar ramanu cinu ina

to the lands. A king self-appointed in the



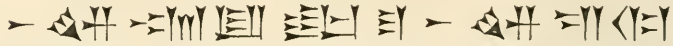
mati ibassi

land is.

81.

Ina arkhi Adaru yumu 14 atalu issacan-va

In the month Adar, the 14th day, an eclipse happens; and



ina rukh sūti izarrikh-va ina rukh iltani

in the south it begins and in the north

igadh

it ends.

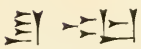
82.

ina matsarti barariti izarrikh-va ina matsarti

In the evening watch it begins, and in the morning

sadurri igadh rukh sūti ina

watch it ends. Southward at the



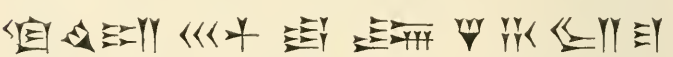
idi pi

time of appearance

83.

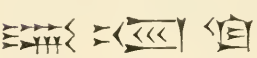
erib tsalam - su innamar - va ana śar

(and) disappearance its shadow is seen; and to the king of



ci - sar - ra uzzu iddan - in sa-kha- lam-ma

Cisurra[1] *a crown was given. Disaster*

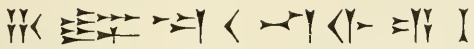


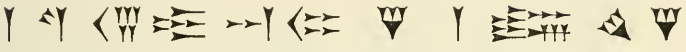
Ur - lab - ci

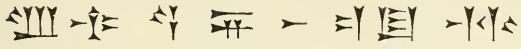
(to) Ur

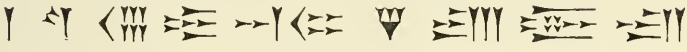
[1] *Cisurra* was the "waste-land of the desert."

84.
Su - ug - gur duri - su ibassi sibri ina sapic
Digging up of its forts is; corn (is) in the outpouring

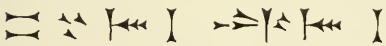

kha - rab - ba u na - si - e - su
of devastation and carrying away of it.

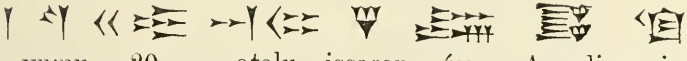
85. 
yumu 15 atalu issacan ana śarra khi - sa
On the 15th day, an eclipse happens. To the king (is) a crown;

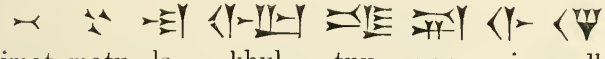

ru - tim zabbi - su ina tuculti ibassi
the forces of his soldiery in service are.

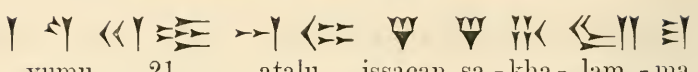
86. 
yumu 16 atalu issacan ta - aś - śu -
On the 16th day an eclipse happens. Plundering

ukh - tuv ina mati ibas - si śarru
in the country is. The king


bi - lat - i - su ippalcatu - su
his subjects revolt from him.

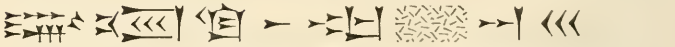
87. 
yumu 20 atalu issacan śar Accadi - ci
On the 20th day an eclipse happens. The king of Accad


imat matu la - khul - tuv yus - si - padh
dies. The land uninjured one rules over.

88. 

yumu 21 atalu issacan sa - kha - lam - ma

On the 21st day an eclipse happens. Disaster (to)



Ur - lab - ci ina pa .... D.P. Sin

Ur, according to the prediction (?) of the Moon-god.

89.

Duppu 22 D.P. namar D.P. Bili 1 sus

The 22nd tablet of "the Illumination of Bel," seventy-

12 sum minuti suat - im

second title of this collection.

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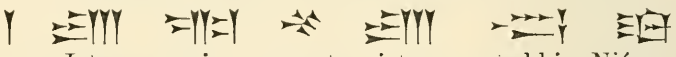
90. 

Istu ris sanat istu arkhi Niśannu

From the beginning of the year; from the month Nisan,

yumu 14 an - ta - lu D.P. Sin

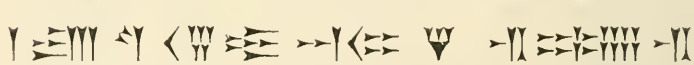
the 14th day, an eclipse of the Moon

issacan 'u - ru - ba - a - tuv ina mati nacri

takes place. Deserts in the hostile land

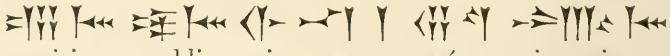
ibassu - va matu izzakhar śarru imat

are, and the land is made small; the king dies.

91. 

Istu yumu 15 atalu issacan khu- sukh -khu

From the 15th day an eclipse takes place. Famine.



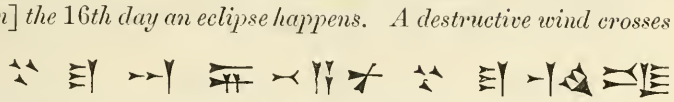
nisi abli - si - na ana caśpa imacciru

Men their sons for silver sell.

92.

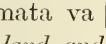
yumu 16 atalu issacan rukhu limnu etik

[*On*] *the* 16*th day an eclipse happens. A destructive wind crosses*



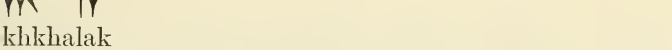
mata va [cacabu] ni-bat-a-nu icassid-va pulu

the land, and [*the planet*] *Mars is in the ascendant, and the cattle*



ikhkhalak

are scattered.

93. 

yumu 20 śarru ana śarra nu-cur-tav yum-ar

[*On*] *the* 20*th day* [*an eclipse happens*]. *King to king hostility sends.*

94.

yumu 21 gur-ruv[1] icbu-ud

[*On*] *the* 21*st day* [*an eclipse happens*]. *Again there is oppression.*

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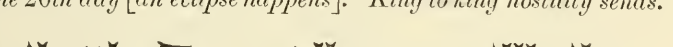
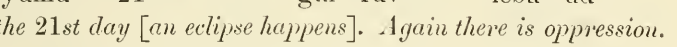
95. 

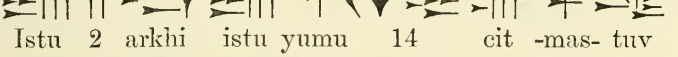
Istu 2 arkhi istu yumu 14 cit-mas-tuv

In the 2*nd month* [*Iyyar*] *on the* 14*th day, an insurrection*



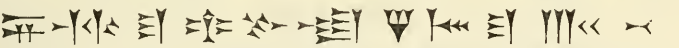
ibassi-va ub-bu-tu giri va śarru imat

takes place, and a destruction of enemies, and the king dies.

96. 

yumu 15 śarru ana śarra nucurta yumar-va

[*On*] *the* 15*th day king to king hostility sends: and*

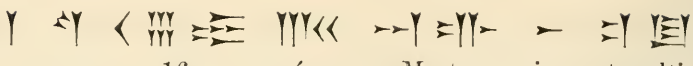


śar cis-sa-ti imat

the king of multitudes dies.

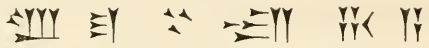
[1] A variant edition (III, 62) has .

[2] The other edition reads , *an-bar-ti*, "a defection" (from עבר).

97. 

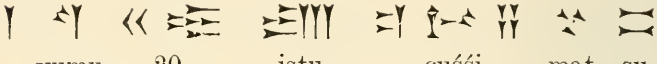
yumu 16 śar Martu ina tuculti

[*On*] *the* 16*th day the king of Phœnicia in battle*



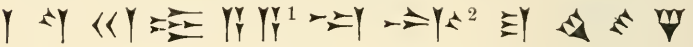
icabbid-va mat-śu ikhkhalak

is defeated, and his country is divided.

98. 

yumu 20 istu cuśśi mat-su

[*On*] *the* 20*th day; on the throne of his country* [*Phœnicia*].

99. 

yumu 21 tihamtu ippalcat-va ..... sa

[*On*] *the* 21*st day, the sea is crossed and its waves are*

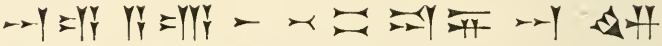
ikhkhalak

divided.

100.

Ina 3 arkhi yumu 14 zunnu ina

In the 3*rd month* (*Sivan*), *the* 14*th day, rain in*



same melu ina nak-bi illacuni D.P. Raman

heaven, flood in the channels will go. The Rain-god

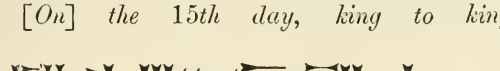
irakhkhits tsab Accad-ci mat-tuv ikhalliku

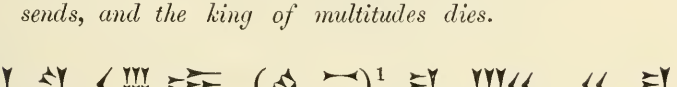
inundates. The men of Accad the country divide.

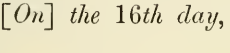
[1] The other edition has .

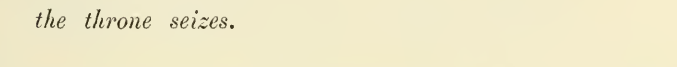
[2] In the other edition . Apparently is erroneously omitted.

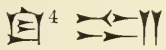
101.
yumu 15 śarru ana śarra mu-cur-tav
[*On*] *the* 15*th day, king to king hostility*

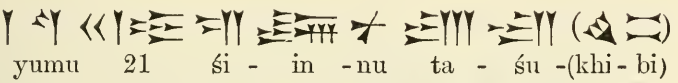

yumar-va śarru cis - sa - ti imat
sends, and the king of multitudes dies.

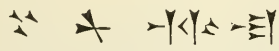
102. 
yumu 16 (khi - bi) - va śarru man - ma
[*On*] *the* 16*th day,* (*wanting*), *and as king a nobody*


cuśśa itsabb-at
the throne seizes.

103. 
yumu 20 śarru an abil -su (khi - bi) - su
[*On*] *the* 20*th day, the king to his son* (*wanting*) *his*


ana sima
for a weighed price.

104. 
yumu 21 śi - in -nu ta - śu -(khi - bi)
[*On*] *the* 21*st day, invasion* [*and*] *plund*[*ering*] (*wanting*)


mati nacri ibassi
of the hostile land takes place.

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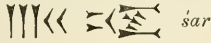
[1] The text from which the variant edition was copied was not defective here, but reads  *śarru iddac* "the king is slain."

[2] Omitted in the variant text.

[3] Here again the variant text has "his crown (gives)."

[4] Instead of this the other edition has *zunni* "rains."

105. Ina 4 arkhi yumu 14 zunnu ina same
In the 4th month (Tammuz), the 14th day, rain in heaven,

meli ina nakbi ib - ba - lu
floods in the channels fall.

106. D.P. Raman irakhkh-its khu- sakh -khu ibassi-va
The Rain-god inundates. A famine ensues, and

matu rabu- tuv ana mati zikhir- ti iccassa- du
a great country by a small country will be conquered.

107. yumu 15 zunnu ina same melu ina
[*On*] *the 15th day, rain in heaven, floods in the*

nakbi ib - ba - lu khu- sakh -khu ina mati ibassi
channels fall. A famine in the land is.

108. yumu 16 khu- sakh -khu sat- ti ibassi
[*On*] *the 16th day, a famine for a year is.*

109. yumu 20 ru - tim śarri u zabbi-su
[*On*] *the 20th day the forces of the king and his soldiery*

cabit- tuv ibassi
numerous are.

[1] The variant text has *ti.*

110.

yumu 21 D.P. Raman gis - su icabbid - va

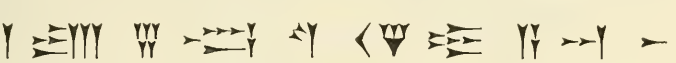
[*On*] *the* 21*st day, a strong wind rages, and*

[1]

tihamtu .... sa ikhallik

the sea its waves divides.

---

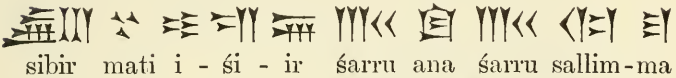
111. 

Ina 5 arkhi yumu 14 zunnu ina

In the 5*th month* (*Ab*), *the* 14*th day, rain in*

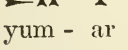
same meli ina nakbi illacu - ni

heaven, floods in the channels will come.

112. 

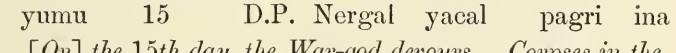
sibir mati i - śi - ir śarru ana śarru sallim-ma

The corn of the country is exported;[2] *king to king peace*



yum - ar

sends.

113. 

yumu 15 D.P. Nergal yacal pagri ina

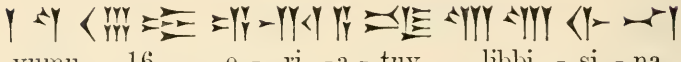
[*On*] *the* 15*th day, the War-god devours. Corpses in the*

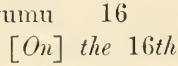
mati nacri ibassu

hostile land are.

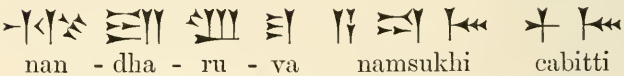
[1] The other text reads .

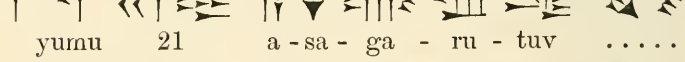
[2] Literally "one exports," from סור.

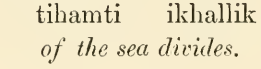
114. 
yumu 16 e - ri -a - tuv libbi - si - na
[*On*] *the* 16*th day pregnant women their offspring*


isallim -a
perfect.

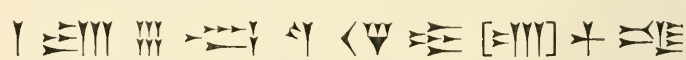
115.
yumu 20 aryai in -
[*On*] *the* 20*th day, lions*


nan - dha - ru - va namsukhi cabitti
appear and crocodiles[1] (*are*) *numerous.*

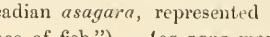
116. 
yumu 21 a - sa - ga - ru - tuv .....
[*On*] *the* 21*st day a hurricane*[1] *the waves*


tihamti ikhallik
of the sea divides.

Here the larger tablet is broken off, and we have to supply the lacuna from a small and partly mutilated tablet (Pl. 62), which contains the text beginning at line 90.

117. 
Ina 6 arkhi yumu 14 [cit-] mas- tuv
In the 6*th month* (*Elul*) *the* 14*th day an insurrection*

[1] The Syllabaries render *a-du* by *mileu* "prince," and *ara* ("eunuch"). Here it must signify some kind of noxious animal; and since the characters are literally "water-going-through," it would seem to be an aquatic creature. See line 64.

[2] This, according to the Syllabary (W.A.I. II, 130) is the Assyrian form of the Accadian *asagara*, represented by the compound ideograph  (? "prince of fish"). *Asa-gara* may signify literally "place-making."

ibassi tsabu ana zir - tuv ikhkhallak
takes place. The soldiery into hostile factions is divided;[1]

zir - mi in - nan - dha - ru
serpents appear

118. yumu 15 aryai in - nan - dha - ru - va
[*On*] *the* 15*th day lions appear and*

namśukhi cabitti
crocodiles (*are*) *numerous.*

119. yumu 16 matu sul - pu - ut - tuv ....
[*On*] *the* 16*th day, the country injury* (?) ....

120. yumu 20 abil śarri aba - su idac - va
[*On*] *the* 20*th day, the son of the king his father slays, and*

ina cuśśi itsab - bat
on the throne seizes.

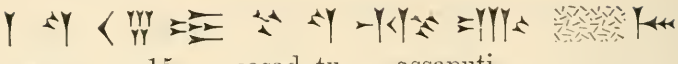
121. yumu 21 śarru cuśśa yu - lab - bar
[*On*] *the* 21*st day, the king the throne perpetuates.*

---

122. Ina 7 arkhi ina yumu 14 tsabi
In the 7*th month* (*Tisri*), *the* 14*th day, soldiers*

istu irtsiti nacri labba icab - ba - tu
from a hostile land the heart (*of the country*) *overpower.*

[1] This may mean, however, "to (their) tents are distributed."

123. 

yumu 15 casad-tu assaputi .....

[*On*] *the* 15*th day, possession of the oracle* .....

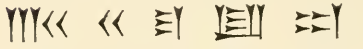
napalcu - tuv

(*are*) *rebellious.*

124.

yumu 16 irtsi - ti ipalcat ina cuśśi

[*On*] *the* 16*th day, the land rebels. On the throne*



śarru man - ma yas - ab

as king a nobody sits.

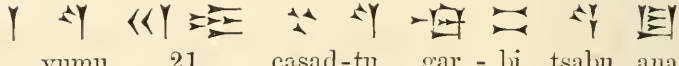
125.

yumu 20 nagab - bu ina zumur mati ibassi

[*On*] *the* 20*th day, devastation in the body of the land is.*

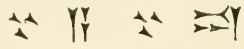
śimmu ta gu (khi - bi)

A pestilence (*rages*) (*wanting*).

126. 

yumu 21 casad-tu gar - bi tsabu ana

[*On*] *the* 21*st day. Conquest of the interior. The soldier to the*



mat - a icassa - du

land will penetrate.

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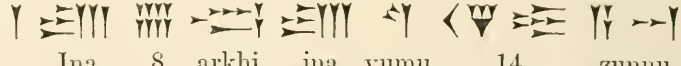
127. 

Ina 8 arkhi ina yumu 14 zunnu

In the 8*th month* (*Marchesvan*), *the* 14*th day, rain*

dha - lim sanat 1 ibassi bi - ib - luv
continuously for one year is. The silt of the

mati ub - bal
land is brought down.

128. a - ci - luv u sallim-ma-nu ina ecil mati ibassi
Food and peace in the places of the land are.

'u - ru - ba - a - tuv issacanu - va
The deserts are inhabited; and

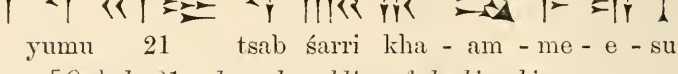
129. śarru sa eli mata gimilla dhaba yulabbar
the king who (is) over the country good benefits perpetuates.

130. yumu 15 . . . . tamtu ikhkhalak
[*On*] *the* 15*th day, the waves of the sea are divided.*

131. yumu 16 'u - ru - ba - a - tuv
[*On*] *the* 16*th day, the deserts*

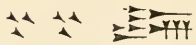
dan - nat ibassa
populated are.

132. yumu 20 śarru ina tuculti icb - ud
[*On*] *the* 20*th day, the king in serviee was strong.*

133. 

yumu 21 tsab śarri kha - am - me - e - su

[*On*] *the* 21*st day, the soldier of the king his* . . . . . .



. . . . . .

. . . . . .

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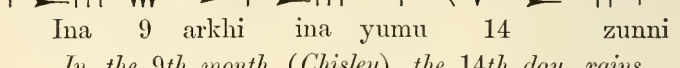
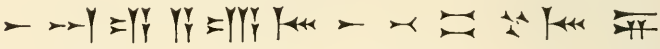
134. 

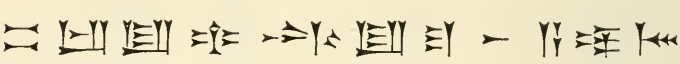
Ina 9 arkhi ina yumu 14 zunni

In the 9*th month* (*Chisleu*), *the* 14*th day, rains*



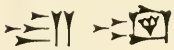
ina same meli ina nak- bi mati ibassi

in heaven; floods in the channels of the lands are.

135. 

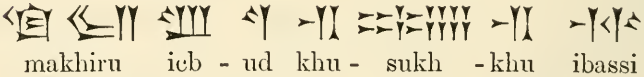
bi - ib - lu yub - bal - lu - va ina aladi (?)

The heart is cast down; and among children (?)



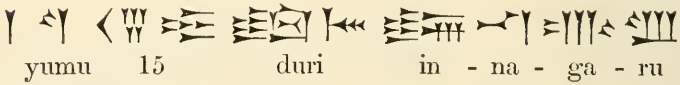
khusukhkhu

(*is*) *famine.*

136. 

makhiru icb - ud khu - sukh - khu ibassi

The tariff is high. A famine occurs.

137. 

yumu 15 duri in - na - ga - ru

[*On*] *the* 15*th day, the forts are dug up;*

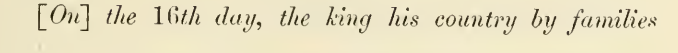
matu yub - bu - ud illac

the land is destroyed.

138.

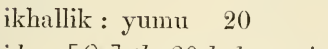
yumu 16 śarru mat - śu pal - dha -ma

[*On*] *the* 16*th day, the king his country by families*



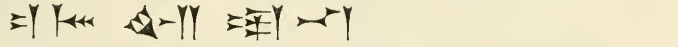
ikhallik : yumu 20 zunni Lib aba idi

divides. [*On*] *the* 20*th day, rains. The child the father knows.*



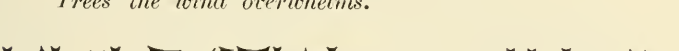
etsi im gin - na (inir)

Trees the wind overwhelms.

139. 

yumu 21 śimmi ina mati ibassu mata

[*On*] *the* 21*st day, sicknesses in the land are. The land*



etsi D.P. Ramanu i - ta - na - ar -khi-its

[*and*] *trees the Rain-god inundates.*

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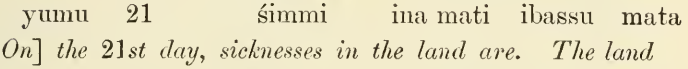
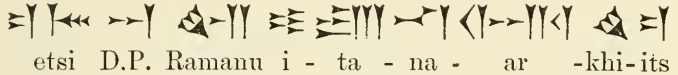
140. 

Ina 11 arkhi ina yumu 14 śarru rabu

In the 11*th month* (*Sebat*), *the* 14*th day, a great king*

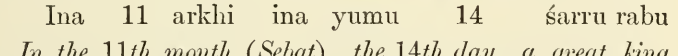


imat zunni ina same itallicu - ni sallim-mu

dies. Rains in heaven will descend. Blessed

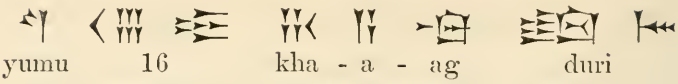
dumku ina matati issacan

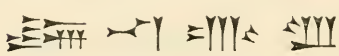
peace in the lands prevails.

141. 

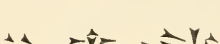
yumu 15 la -kha- aś - śu ina cuśśi itstsabat

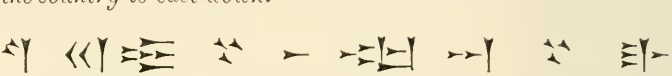
The 15*th day; a plebeian on the throne seizes.*

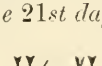
142. 
yumu 16 kha - a - ag duri
The 16th day; a festival-keeping; the forts


in - na - ga - ru
are dug up.

143.
yumu 20 śar Acada- ci imat-va bi - ib - lu
The 20th day; the king of Accad dies, and the heart


mati yub - bal
of the country is cast down.

144. 
yumu 21 matu ina pi ili matu rabu
The 21st day; the country (is) before the god. A great country


ikhkhalak
is divided.[1]

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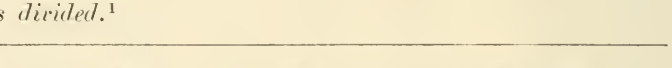
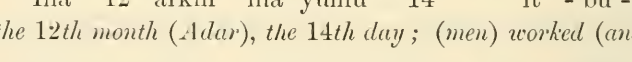
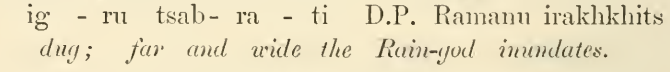
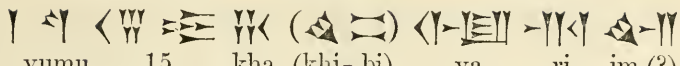
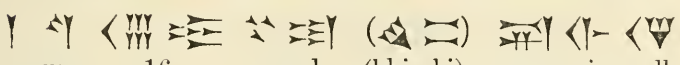
145. 
Ina 12 arkhi ina yumu 14 it - bu - su
In the 12th month (Adar), the 14th day; (men) worked (and)


ig - ru tsab- ra - ti D.P. Ramanu irakhkhits
dug; far and wide the Rain-god inundates.

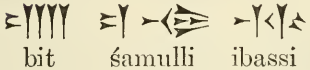
146. 
nisi khir - ri - si - na ana caśpa imacaru
Men their dwellings for silver sell.

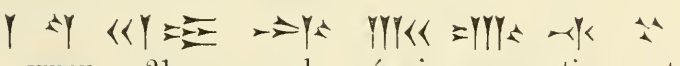
[1] , however, also represents *nabu, innabi;* and the sentence may therefore be translated "the country by the mouth of the god a great country is proclaimed."

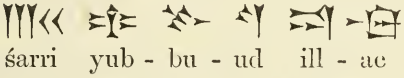
147. 
yumu 15 kha (khi- bi) va ri - im (?)
The 15th day; a festival (wanting) and exaltation (?).[1]

148. 
yumu 16 casad (khi - bi) yus - si - padh
The 16th day; conquest (wanting) he causes to rule.

149.
yumu 20 sa - akh - lu - uk - ti
The 20th day; destruction


bit śamulli ibassi
of the house of the image takes place.

150. 
yumu 21 pal śarri ga - ti mat
The 21st day; the life of the king is cut off. The country


śarri yub - bu - ud ill - ac
of the king goes to destruction.

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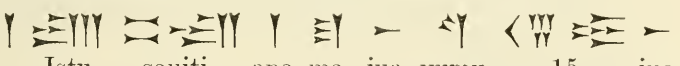
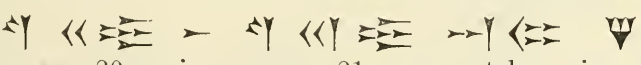
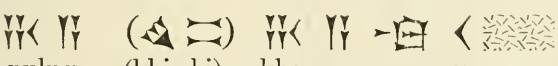
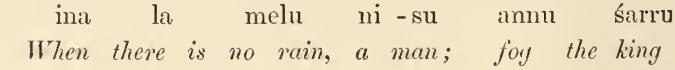
151. 
Istu saniti ana ma ina yumu 15 ina
From the 2nd time to this, on the 15th day, on the


yumu 20 ina yumu 21 atalu issacan
20th day, on the 21st day, an eclipse takes place.

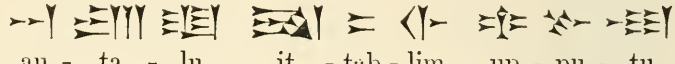

pulug (khi - bi) kha - a - ag u . . . .
Division (wanting) a festival and

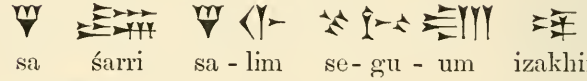
[1] Perhaps the characters are to be read *nabadh sami* "brightness of sky."

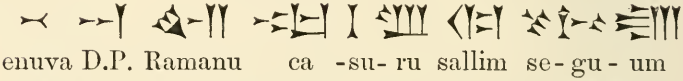
152. 
ina la melu ni - su annu śarru
When there is no rain, a man; foy the king

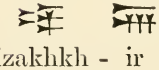
(khi - bi) ru va bi du
(*wanting*) . . . . . .

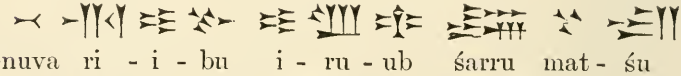
153.
Ina arkhi Niśanni istu yumu 1 adi yumu 30
In the month Nisan, from the 1*st day to the* 30*th day*

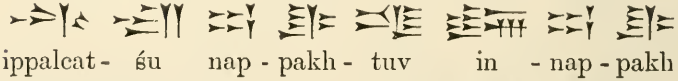

an - ta - lu it - tab - lim up - pu - tu
an eclipse failed. Defeat


sa śarri sa - lim se - gu - um izakhir
of the king. Peace (and) happiness are diminished.

154. 
enuva D.P. Ramanu ca -su- ru sallim se - gu - um
When the Air-god (is) fine, peace (and) happiness


izakhkh - ir
are small.

155. 
enuva ri - i - bu i - ru - ub śarru mat - śu
When rain has descended, the king his land


ippalcat - śu nap - pakh - tuv in - nap - pakh
revolts from him. A rising takes place.

156. enuva rukhu makhar mati iś - khup zunni ina

When the wind the face of the land sweeps, rains in the

mati erubu

country descend.

---

157. Ina arkhi Airu istu yumu 1 adi 30

In the month Iyyar, from the 1st day to the 30th day

an - ta - lu it - tab - lim sibru ina śal - ṭe

an eclipse was wanting. Corn in heaps

i - ru - ur

(*one*) *burns.*[1]

158. enuva D.P. Ramanu ca - su - ru pa - an - ti

When the Air-god (is) fine, the faces

asariti ina ekili la dunki

of the first-born in the field are not fortunate.

159. enuva ri - i - bu i - ru - ub kha - rab ina

When rain has descended, a sword (?) in

tam - mi . . . .

(*those*) *days* . . . .

[1] This is probably connected with *nararu* and *arur*, by which "heat" or "light" is translated. The root is common enough in the Semitic languages. In Hebrew we have נר "light," תנור "furnace," ירה "to burn," possibly אור "light," and in Arabic *nāra*, *nahara* "to shine," *'arra* "fire."

160. enuva rukhu makhar mati iś - khup sanat 10

When the wind the face of the land sweeps for 10 *years,*

matu di - bi - ri - si .....

the land its pastures (?) .....

---

161. Ina arkhi Sivanu istu yumu 1 adi yuma

In the month Sivan, from the 1*st day to the*

30 an - ta - lu it -tab-lim sibirri

30*th day, an eclipse failed. The crops of*

mati la dumki

the land (*are*) *not good.*

162. enuva D.P. Ramanu ca -su- ru se - gu - um ina

When the Air-god [*is*] *fine, prosperity. On the*

niduti ablu a - ru - ur

high places the son is burnt.

163. enuva ri - i - bu i - ru - ub śarru se- ed - di

When rain has descended, the king his ancient

labari - su i - gal

domains gladdens.

164. enuva rukhu makhar mati iś - khup sanat 3

When the wind the face of the land sweeps, for 3 years

śar mata ina di - bi - ri id - (din)

the king of the land to pastures (?) gives.

---

165. Ina arkhi Dūzu istu yumu 1 adi yuma 30

In the month Tammuz, from the 1st day to the 30th day,

an - ta - lu it - tab - lim sibru

an eclipse is wanting. Corn

la dumku.

not good.

166. enuva D.P. Ramanu ca - su - ru sibru u

When the Air-god (is) fine, corn and

ca - lum - ma la dumku

garden-stuff not flourishing.

167. enuva ri - i - bu i - ru - ub aibu

When rain has descended, the wicked

. . . . . .

. . . . . .

168. enuva rukhu makhar mati iś - khup sanat 3
When the wind the face of the country sweeps, for 3 years

D.P. Ramanu mata yacal u .....
the Air-god the land devours, and .....

---

169. Ina arkhi Abu istu yumu 1 adi
In the month Ab, from the 1st day to the

yuma 30 an - ta - lu it - tab - lim
30th day, an eclipse was wanting.

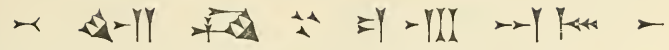
ca - lum - ma ziru .....
Garden-stuff (and) seed [not good].

170. enuva D.P. Ramanu ca - su - ru zunnu u melu
If the Air-god [is] fine, rain and flood

erubuni sib - ri - su - nu dumku
will descend; their crops [are] prosperous.

171. enuva ri - i - bu i - ru - ub śar mati
If rain has descended, the king of the country

śu - un - gav yumam - mar
imprisonment sees.

172. 

enuva rukhu makhar mati iś-khup ili ina

If the wind the face of the land sweeps, the gods in the

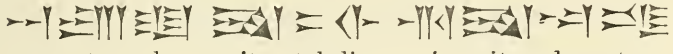
zumur mati sanat 5 yulabbaru

heart of the country for five years remain.

173.

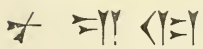
Ina arkhi Ululu istu yumu 1 adi yuma 30

In the month Elul, from the 1st day to the 30th day,



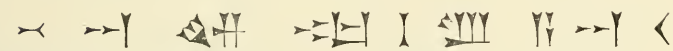
an - ta - lu it -tab-lim ri - it - ba - tuv

an eclipse was wanting. The increase



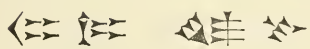
la dumkatu

not good.

174. 

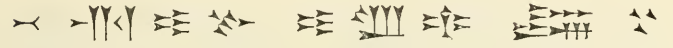
enuva D.P. Ramanu ca -su- ru zunnu u

If the Air-god [is] fine, rain and



me - luv mur - bu

flood (will) come down.

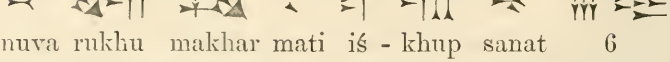
175. 

enuva ri - i - bu i - ru - ub śar mati

If rain has descended, the king of the land

śu - un - gav yunam - mar

imprisonment sees.

176. 

enuva rukhu makhar mati iś - khup sanat 6

If the wind the face of the land sweeps, for 6 years

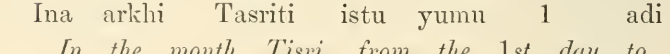
matu khusukhkhu yunam - mar

the country famine sees.

177.

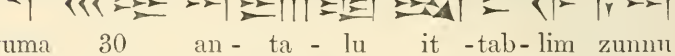
Ina arkhi Tasriti istu yumu 1 adi

In the month Tisri, from the 1st day to



yuma 30 an - ta - lu it -tab- lim zunnu

the 30th day, an eclipse was wanting. Rain



u melu erubu -va sibir mati la dumku

and flood descend, and the corn of the land not good.

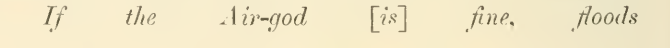
178.

enuva D.P. Ramanu ca -su- ru meli

If the Air-god [is] fine, floods

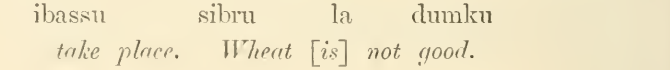
ibassu sibru la dumku

take place. Wheat [is] not good.

179. 

enuva ri - i - bu i - ru - ub sibir mati

If rain has descended, the corn of the land



dumku .....

flourishes; .....

180. enuva rukhu makhar mati iś - khup sanat 3

If the wind the face of the land sweeps, for 3 years

gar - rit nakri mata yu - sa- ats -tsa - ka

invasions of the foe the land devastate.

---

181. Ina arkhi Arakh-samna istu yumu 1 adi yuma

In the month Marchesvan, from the 1st day to the

30 an - ta - lu it -tab- lim di -khu

30th day, an eclipse was wanting. Opposition

ina mati ibas - si

in the land is.

182. enuva D.P. Ramanu ca -su- ru malu u

If the Air-god [is] fine, flood and

bu - ti - ic - tuv illa - can

water-courses come.

183. enuva ri - i - bu i - ru - ub matu . . . . .

If rain has descended, the land for

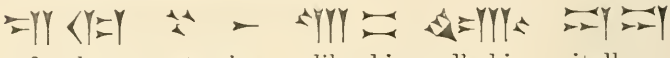
30 sa -pa - ar

30 *generations (?) [is] prosperous.*

184.

enuva rukhu makhar mati iś - khup sibir mati

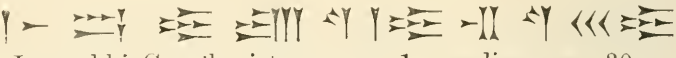
If the wind the face of the land sweeps, the corn of the land [is]



dumku matu ina lib - bi dhabi itallac

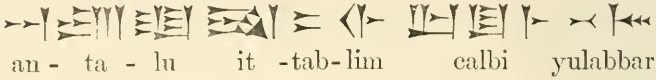
good. The country with good heart goes.

---

185. 

Ina arkhi Cuzallu istu yumu 1 adi yuma 30

In the month Chisleu, from the 1st day to the 30th day,



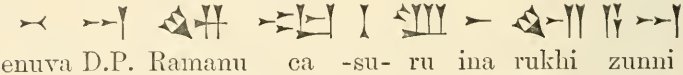
an - ta - lu it -tab- lim calbi yulabbaru

an eclipse was wanting. Dogs grow old.

186.

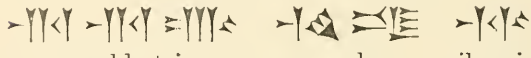
D.P. Nergal ni - si yacal

The War-god men devours.

187. 

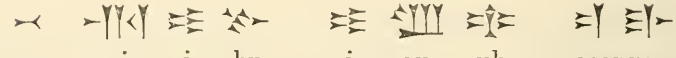
enuva D.P. Ramanu ca -su- ru ina rukhi zunni

If the Air-god [is] fine, in the wind [and] rain



rakhatsi pulu ibassi

inundating the cattle are.

188. 

enuva ri - i - bu i - ru - ub manzaz

If rain has descended, the fortress

śarri issallam

of the king is completed.

189.

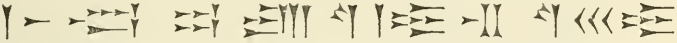
enuva rukhu makhar mati iś - khup makhiru

If the wind the face of the land sweeps, the tariff

zakhiru ana pan mati i - dir - tu erubu

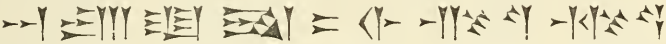
(is) small; against the land the troops descend.

---

190. 

Ina arkhi Dhabiti istu yumu 1 adi yuma 30

In the month Tebet, from the 1*st day to the* 30*th day,*

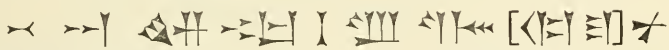


an - ta - lu it -tab-lim tib -ut itstsuri

an eclipse was wanting. An invasion of birds [*and*]

nuni sibir mati izakhkhir

fish the crops of the land impoverishes.

191. 

enuva D.P. Ramanu ca -su- ru yumi sallin-ma-nu

If the Air-god [*is*] *fine, for days peace*

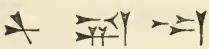
naśaku ri - bu ibas - si

arises: there is rain.

192.

enuva ri - i - bu i - ru - ub śarru ina ali

If rain has descended, the king into the city



nacri yus - ba

of an enemy causes to go.

193. enuva rukhu makhar mati iś-khup ana .....

If the wind the face of the land sweep, to .....

sanat 2 śarra ili i-kul-lu

for 2 years the king the gods dishonour.

---

194. Ina arkhi Sabadhi istu yumu 1 adi yuma 30

In the month Sebat, from the 1st day to the 30th day.

an-ta-lu it-tab-lim (khi-bi)

an eclipse failed (wanting).

195. enuva D.P. Ramanu ca-su-ru urpātu

If the Air-god [is] fine, a cloud

.....va bitat ena-khu

..... and houses go to ruin.

196. enuva ri-i-bu i-ru-ub gar-rit

If rain has descended, invasions of an

nacri ibassa

enemy take place.

197. enuva rukhu makhar mati iś-khup matu .... tab-bar

If the wind the face of the land sweeps, the land .....

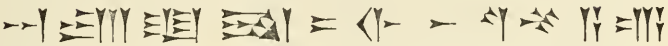
sanat 6 lib-bi la dhabu

for 6 years the heart (is) not good.

198.

Ina arkhi Addari istu yumu 1 adi yuma 30

In the month Adar, from the 1st day to the 30th day,

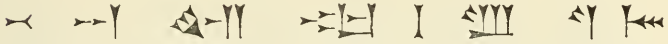


an - ta - lu it -tab- lim ina yu-mu melu

an eclipse failed. During the day a flood

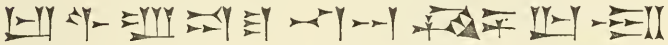
ibā -va mie rabi yu -bat- tak

comes, and great waters makes force their way.

199. 

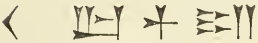
enuva D.P. Ramanu ca - su - ru yumi

If the Air-god [is] fine, the days



ip - tal - sid - du - va na - an - dhur aryu

. . . . . *and (there is) an appearance of lion(s)*



u akhu

and hyæna(s).

200.

enuva ri - i - bu i - ru - ub gar - rit

If rain has descended, invasions

nacri ibassa

of the foe occur.

201.

enuva rukhu makhar mati iś - khup matu suatu

If the wind the face of the land sweeps, that land is

yub - bu - da khul - liv ca - ri - e
destroyed. Misfortunes the fortresses of

mati i - ri - ik - ka
the land desolate.

---

202. Ta - mi - a - tuv eli - tuv e - nu - va
(In) the circle the upper when the

Sin bat - lu - ug - ta isacci-nu ili sa
Moon a section shall make, the gods of

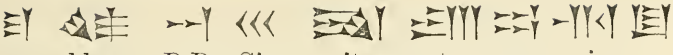
sami u irtsiti
heaven and earth

203. ip - rit a - mi - lu - ti tu - bu - ul - su - nu
dearth of men [and] their overthrow

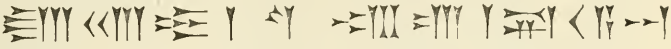
i - si - iv - va
bring about; and

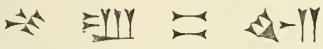
204. an - ta - lu ri - ikh - tsu mur - tsu
eclipse, inundation, sickness,

mu - tuv galli rabi sab - bi
death: the seven great spirits

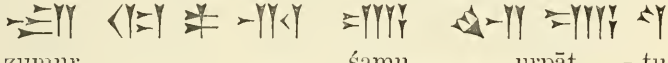
205. 
ma - khar D.P. Sin it - ta -nap- ri - cu
before the Moon are broken.

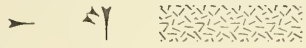
---

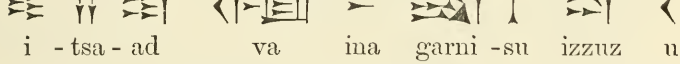
206. 
duppu 23 Namari- Bilu 1 sus 10
Twenty-third tablet of the Illumination of Bel.[1] *Seventieth*

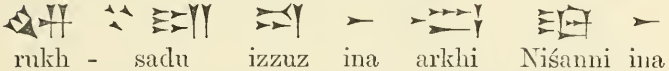

sum minuti suat - im
title of this number.

207.
Samsu ina arkhi Niśanni yumu 1 ina tamarti-su
The Sun in the month Nisan, the 1st day, at its appearance


zumur ..... śamu urpāt - tu
the body ..... (is) dark: a cloud

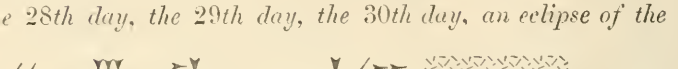

ina yumi .....
during the day .....

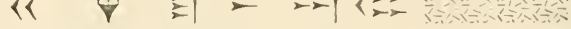
208. 
i - tsa - ad va ina garni -su izzuz u
seizes, and at its extremity was fixed and

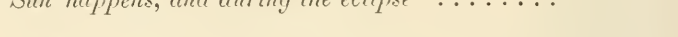

rukh - sadu izzuz ina arkhi Niśanni ina
eastward was fixed. In the month Nisan during

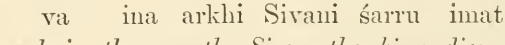
yumi .....
the day .....

[1] The upright wedge cannot signify a man's name in this passage, since the book is elsewhere called simply Bel (W.A.I. III, 52, 27).

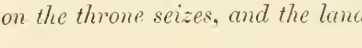
209. 
yumu 28 yumu 29 yumu 30 atalu
The 28th day, the 29th day, the 30th day, an eclipse of the


Samsi issacan-va ina atali .....
Sun happens, and during the eclipse .....

210. 
va ina arkhi Sivani śarru imat-va abil-su
and in the month Sivan the king dies, and his son


ina cuśśi itsabbat-va matu .....
on the throne seizes, and the land .....

211.
lib mati dh-ab ilu zunni -su ci-ma
The heart of the land [is] good. The god his rains like


nin-gar i-na-śi
a canal (?) sends.

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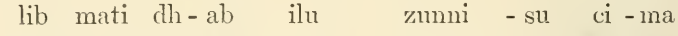
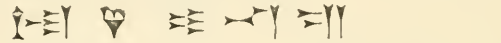
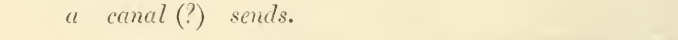
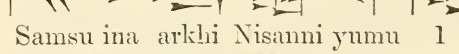
212. 
Samsu ina arkhi Nisanni yumu 1 ina tamarti-su
The Sun in the month Nisan, the 1st day, at its appearing

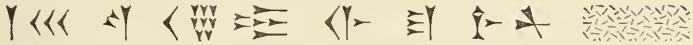

arkutu u urru .....
yellowness and light .....

213. 
ina arkhi Sivani atalu issacan-va irti pan-su
In the month Sivan, an eclipse takes place, and before its face


arkutu u urru .....
yellowness and light .....

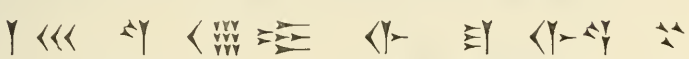
W.A.I. III, 61, 2.

Where the tablet first becomes legible, we read:—

1. 

Sin yumu 18 innamar-va nucurtu .....

The Moon, the 18th day, is seen; and hostility .....

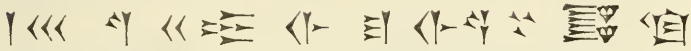
2. 

Sin yumu 19 innamar - va dumku mat

The Moon, the 19th day, is seen; and good luck [to]

Martu .....

Phœnicia .....

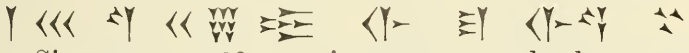
3. 

Sin yumu 20 innamar-va dumku mat Acada- ci

The Moon, the 20th day, is seen; and prosperity (to) Accad,

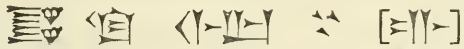
limuttu mat Martu nacru iba - va mata ....

adversity [to] Phœnicia; an enemy comes and the land [spoils].

4. 

Sin yumu 28 innamar - va dumku mat

The Moon, the 28th day, is seen; and prosperity [to]



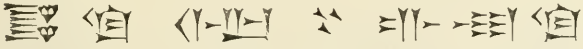
Acada - ci limuttu mat Martu

Accad, adversity [to] the West.

5.

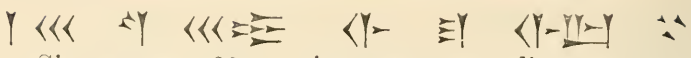
Sin yumu 29 innamar - va dumku mat

The Moon, the 19th day, is seen; and prosperity [to]



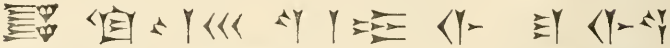
Acada - ci limuttu mat Mar - tu - ci

Accad, adversity to Phœnicia.

6. 

Sin yumu 30 innamar - va limuttu mat

The Moon, the 30th day, is seen; and adversity [to]



Acada- ci : Sin yumu 1 innamar - va dumku

Accad. The Moon the 1st day is seen; and prosperity

mat Acada- ci

[to] Accad.

7.

Ina la minuti -su-nu Sin u Samsu itti a -kha- i

Contrary to their calculated time the Moon and the Sun with one

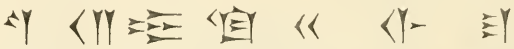
innamaru nacru dan - nu mata i - śi - h

another are seen. A strong enemy the country spoils.

8.

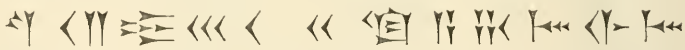
śar Acada - ci ina saplit nacri-su issac- an

The king of Accad under his enemy is placed.



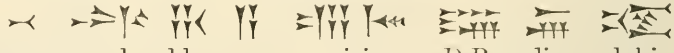
yumu 12 itti Samsi innamar - va

The 12th day with the Sun (the Moon) is seen; and

9. 

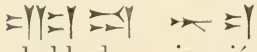
yumu 12 Sin u Samsu itti a -kha- i innamaru

The 12th day, the Moon and the Sun with one another are seen.



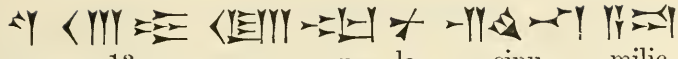
enuva pal -kha - a nisi D.P. din - daki

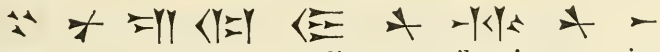
Then suddenly (of) men the executioner

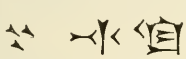


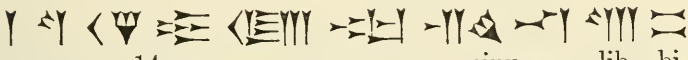
kakkada icc - iś

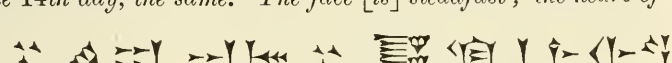
the head cuts off.

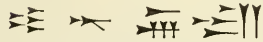
10. 
yumu 13 .... pu la cinu milic
The 13th day, the same. The face not steadfast: the king of


mati la dumku saplis nacra ibassi nacru ina
the land not prosperous. Under the foe he is. The foe in

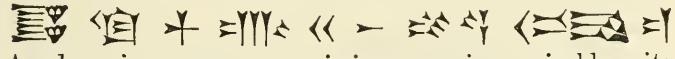

mati yusab
the land stays.

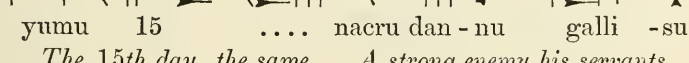
11. 
yumu 14 .... pu cinu lib-bi
The 14th day, the same. The face [is] steadfast; the heart of

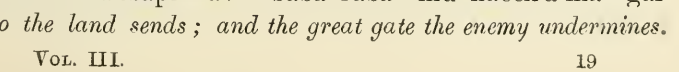

mati idh-ab ili mat Acada-ci ana dumka
the land is good. The gods Accad unto prosperity


i-khaś-śa-śu
determine.

12.
khu-ud lib-bi nisi issac-an pulu mat
Joy of the heart of men results. The cattle of


Acada-ci par-ga-nis ina zeri irabb-its
Accad in safety in the desert lie down.

13. 
yumu 15 .... nacru dan-nu galli-su
The 15th day, the same. A strong enemy his servants


ana mata isapr-av baba raba mu-nacciru ina-gar
to the land sends; and the great gate the enemy undermines.

14. yumu 16 .... śarru ana śarra nucurti
The 16th day, the same. King to king hostility

yum - ar śarru ina ecalli -su ana minuti
sends. The king in his palace for the period of a

arkhi yu - ta - śar
month returns.

15. sepu nacru ana mati-su issac-an nacru ina mati-su
The hostile foot against his land is set. The foe in his land

sal - dha - nis ittallicu
tyrannically march.

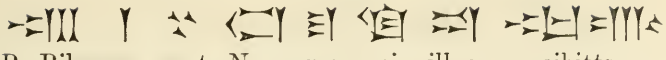
16. yumu 17 .... sepu saku ana mata
The 17th day, the same. The lofty foot [goes] against the land.

lisanu śa - khap - ti mata eb - il
An insolent tongue over the land is lord.

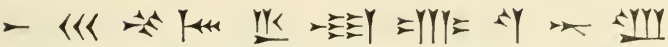
17. yumu 20 .... tsabu man- da[1] idac va mata
The 20th day, the same. The soldier barbarian smites, and the land

eb - il paracci ili rabi naśśukhi
rules. The altars of the great gods are taken away.

[1] The word is probably of Accadian origin. It is applied to Teispes the Kimmerian.

18. 

D.P. Bilu ana mat Num-ma- ci illac cibitta
Bel to Elam goes. At last



ina 30 sanat duk- tu - u yut - tar - ru
after 30 years the smitten are restored.

ili rabi itti su-nu i - tur - ru
The great gods with them return.

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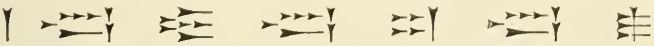
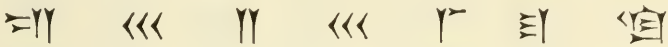
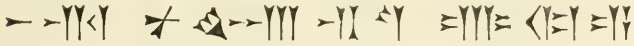
19. 

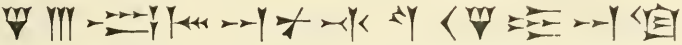
Arkhu Cuzallu arkhu Dhabitu arkhu Sabadhu
The month Cisleu, the month Tebet, the month Sebat,



karan Sin sanitu Sin malu - va itti
the horn of the Moon [is] double; the Moon [is] full, and with



as- ri nu- ukh -khu-ut u - di - e
the (holy) places rest from sacrifices.

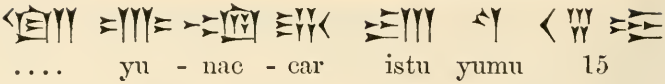
20. 

sa 3 arkhi an-nu- ti yumu 15 samu
For these 3 months, [on] the 15th day, this heaven

an-nu innamar: sa yumu 30 la urpāti
is seen: on the 30th day no mists.

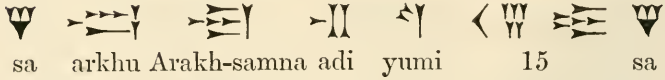
21.

Sin kharrana-su esir - va Samsu im-ma ill - ac
The Moon its path directs, and the Sun during the day goes.



.... yu - nac - car istu yumu 15

The same changes from the 15th day

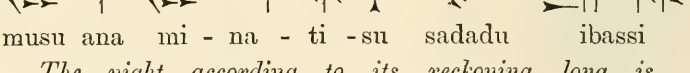


sa arkhu Arakh-samna adi yumi 15 sa

of the month Marchesvan to the 15th day of the

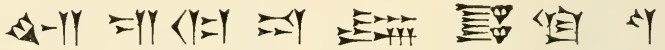
arkhu Cuzallu

month Cisleu.

22. 

musu ana mi - na - ti - su sadadu ibassi

The night according to its reckoning long is.

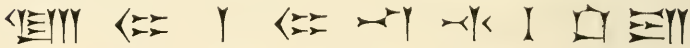


rukh iltanu illac śar Acada - ci yumi

The north wind blows. The king of Accad, (his) days

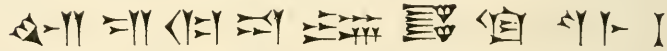
sadadi lib nisi idhab

[*are*] *long, the heart of (his) people is good.*

23. 

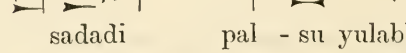
.... musu ana mi - na - ti - su sadadu

The same. The night according to its reckoning [*is*] *long.*



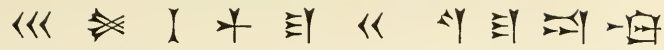
rukh iltanu illac śar Acada- ci yumi - su

The north wind blows. The king of Accad. his days



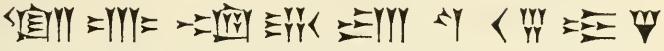
sadadi pal - su yulabbar

[*are*] *long, his life is extended.*

24. 

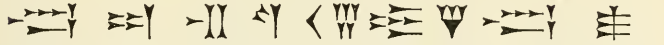
Sin urukh - su esir - va Samsu im - ma ill - ac

The Moon its way directs and the Sun during the day goes.



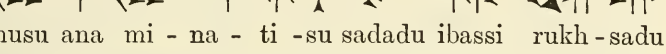
.... yu - nac - car istu yumu 15 sa

The same changes. From the 15th day of the



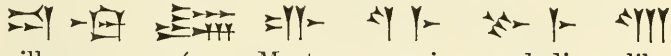
arkhu Dhabitu adi yumu 15 sa arkhu Sabadhu

month Tebet to the 15th day of the month Sebat.

25. 

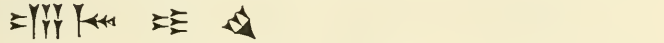
musu ana mi - na - ti -su sadadu ibassi rukh - sadu

The night according to its stated time is long. The west wind



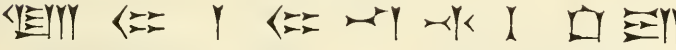
ill - ac śar Martu yumi sadadi lib

blows. The king of Syria, [his] days [are] long. The heart of



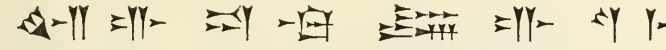
nisi i - dhab

the people is good.

26. 

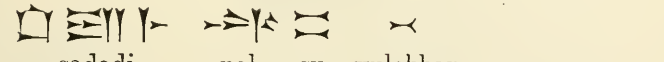
.... musu ana mi - na - ti -su sadadu

The same. The night according to its stated hours [is] long.



rukh - sadu ill - ac śar Martu yumi

The west wind blows. The king of Syria, [his] days



sadadi pal - su yulabbar

[are] long. His life is extended.

27. Ni - ib - dhu ana na - pa - akh D.P. Samsi
A bright light at the rising of the Sun

ipp - akh -va ina kal nisi itar-va .....
arises, and in the assembly of the people is, and .....

28. yumi rubi .....
the days of the prince [? *are long*].

29. Samsu icassid-va cacabu arcu -su emid sallim-ma
The Sun is ascendant, and a star after it appears. Peace

itti .....
with .....

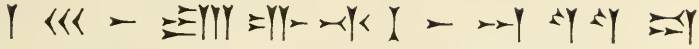
30. sa śimmi mitkharis-va nisi .....
of pestilence exceedingly, and men .....

31. Samsu icassid-va urpāti yumakhkharu ....
The Sun is in the ascendant, and clouds are present ....

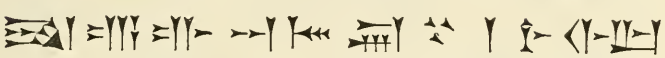
32. Arkhu Cuzallu yumu 20 pa isaccin-va
[*In*] *the month Cisleu, the* 20*th day, it makes* [*its*] *appearance, and*

ina nahdi Sin .....
in clearness the Moon .....

W.A.I., Pl. 64.—Obverse.

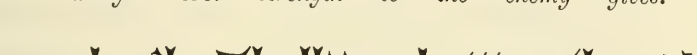
1. 

Sin ina ta - mar - ti -su ina D.P. Samsi - atsi
The Moon at its appearance at Sun-rise

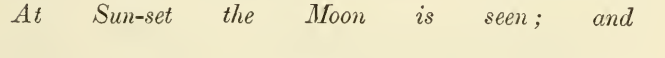


it - tan - mar ili icli mati ana limutta
is seen. The gods the plains of the land to evil

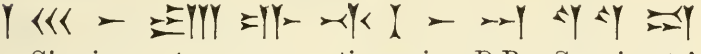
ikhaśśaśu D.P Bilu idluti ana D.P. nacra inadd-in
assign. Bel strength to the enemy gives.

2. 

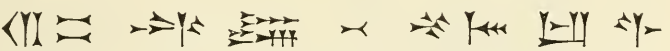
ina D.P. Samsi- eribi D.P. Sin innammar-va
At Sun-set the Moon is seen; and



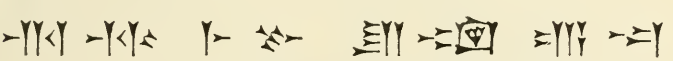
va ina D.P. Samsi- eribi D.P. Sin icassid-va
also at Sun-set the Moon is in the ascendant; and

3. 

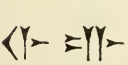
Sin ina ta - mar - ti -su ina D.P. Samsi - atsi
the Moon at its appearance at Sun-rise (is)



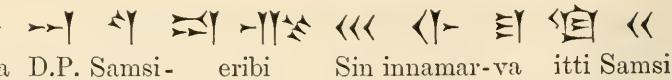
natkhu pal śarri yulabbar sanat ip - pi-
imperfect. The life of the king is long. [For] years is

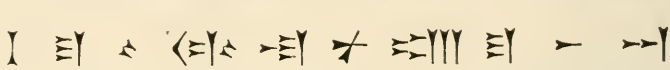


ri - ic sib - bu khusukhkhu lab - ba
broken (his) diadem. Excessive famine

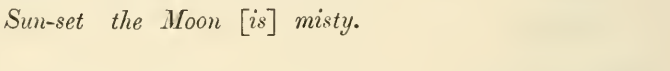


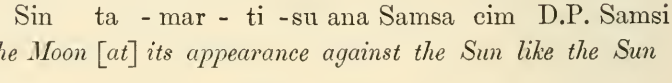
inna - mar
is seen.

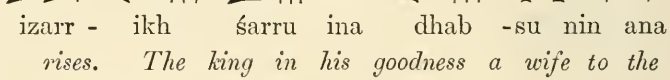
4. 
ina D.P. Samsi- eribi Sin innamar-va itti Samsi
At Sun-set the Moon is seen, and with the Sun

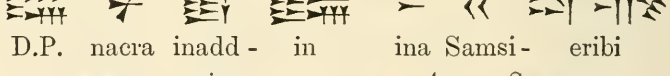

eruv-va : ul - la - nu - um - ma ina D.P.
sets, and : or afterwards at

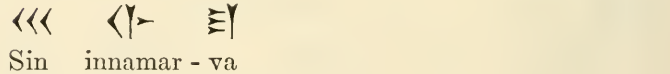
Samsi- eribi Sin śamu
Sun-set the Moon [is] misty.

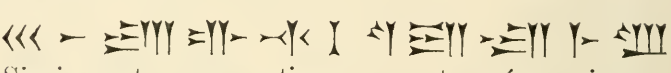
5. 
Sin ta - mar - ti -su ana Samsa cim D.P. Samsi
The Moon [at] its appearance against the Sun like the Sun

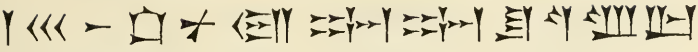

izarr - ikh śarru ina dhab -su nin ana
rises. The king in his goodness a wife to the


D.P. nacra inadd - in ina Samsi- eribi
enemy gives. At Sun-set

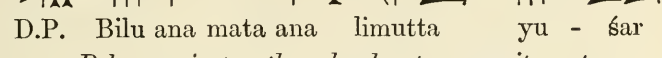

Sin innamar - va
the Moon is seen: and

6. 
Sin ina ta - mar - ti -su urrut - śu mi - ru
the Moon at its appearance, its light the sight


. . . . . va itti Samsi innamar-va
pierces and with the Sun it is seen; and

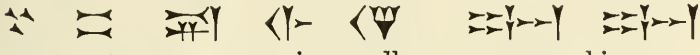
7. 

Sin ina gar-nu cim cacabi su-ut-ru-ur
the Moon in (its) horn like the stars [is] white[1]

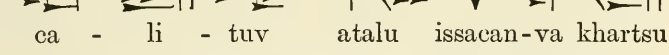


D.P. Bilu ana mata ana limutta yu-śar
Bel against the land to enmity turns:

tibu-te tsabu man-da ana mata ibassi-va
the invasion of the soldier barbarian against the land is; and

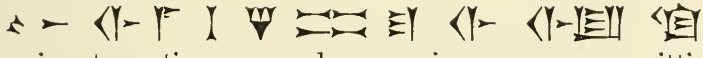
8. 

mata-suata yus-si-padh cacabi
that land he rules. Of the stars

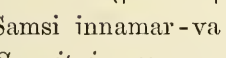


ca-li-tuv atalu issacan-va khartsu
a total eclipse there is, and the obscurity

ca-li-tuv
(*is*) *complete.*

9. 

ina tamarti-su sa-ku-ma innamar va itti
at its appearance the tip is seen, and with the



Samsi innamar-va
Sun it is seen: and

[1] *Sutruru* has the same root as *saruru* "the bright firmament," which is given as a synonyme of *nipkhu* "the dawn," *sibubu* "the bright sky," *namri 'aru, milammu, birbirru,* and *iddisū.* which is usually translated by *śamu* "blue," and sometimes by *khalabu* "white" or "covered," has also the rendering *sutruru* attached to it. But see p. 227, note.

10. Sin ina ta - mar - ti arkhi samu
The Moon at the beginning of the month the heaven

sa - pi - ic[1] : samu sa - pu .....
piles (with clouds) : the sky is white with rain

sa - ku -ma innamar va itti Samsi innamar-va
the tip is seen; and with the Sun it is seen; and

11. .... ina Sa - pa ..... sa rahā - bu
.... *in its cloud-rack (?) a cloud*

sa - pu - u issacan urpātu ina urpāti
white is formed; a rain-cloud on the white

sa - pa - ti innamar-va
cloud is seen; and

12. [Sin] ina ta - mar - ti -su cima-barzillis illac
the Moon at its appearance like iron goes.

D.P. Bilu cacci -su ana D.P. nacra inadd- in
Bel his weapons to the enemy gives.

sa - ku -va innamar va itti Samsi innamar-va
The tip is seen; and with the Sun [the Moon] is seen; and

[1] The ideograph used for this is , which also means "to stick" and "a tablet," from the clay being kneaded by the hands.

13. [𒌍 𒁹𒁹𒁹] 𒁹 𒌍𒁹 𒁹𒁹 𒁹 𒁹𒁹𒁹𒁹𒁹 𒁹𒁹𒁹𒁹𒁹 𒁹𒁹𒁹𒁹

16. Sin ina tamarti-su gabil same ics-ud
The Moon at its appearance the middle of heaven attained.

rubu ni-ip-ri-na inam-mar
The prince affliction sees.

17. Sin ina tamarti-su sa-ku-va innamar nacru
The Moon at its appearance, the upper part is seen. An enemy

ina mati isab ba-śin-ni
(*is*) *in the land campaigns* . . . . . .

18. Sin ina tamarti-su ci-ta-ma innamar nacru
The Moon at its appearance, the lower part is seen. A foe

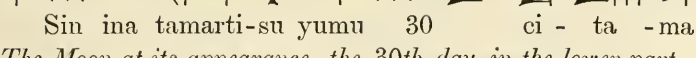
ina mati isab atalu gabli-ti
in the land campaigns. An eclipse of the middle part.

19. Sin ina yumu 30 innamar-va D.P.
The Moon on the 30th day is seen, and

Sul-pa-ud-da innamar su ci-ta-ma
Mercury is seen. It in the lower part

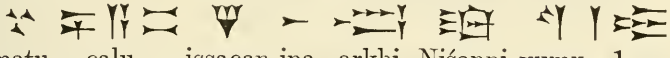
naz-iz ina arkhi Sivani atalu issacan-va śar
is fixed. In the month Sivan an eclipse occurs, and the king of

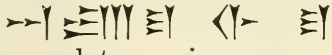
Acada-ci imat
Accad dies.

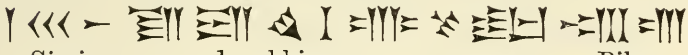
20. 
Sin ina tamarti-su yumu 30 ci - ta -ma
The Moon at its appearance, the 30th day, in the lower part

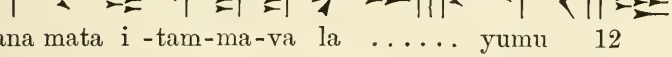
innamar - va
is seen; and

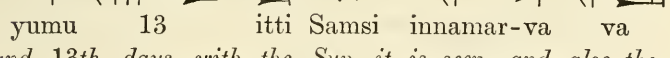
21.
Sin ina yumu 1 parzillis nazuz limut - tiv
the Moon, on the 1st day, like iron is fixed. Evil (to)

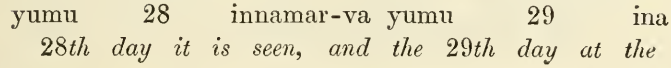

matu calu issacan ina arkhi Niśanni yumu 1
all the land results. In the month Nisan, the 1st day,

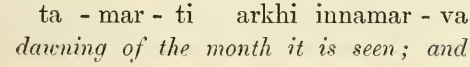

elutu innamar-va
the upper part is seen; and

22. 
Sin ina sa - da -khi-su yu -se- sar Bilu
the Moon at its festival returns. Bel


ana mata i -tam-ma-va la ..... yumu 12
for the land decrees, and lightens (?) not. The 12th


yumu 13 itti Samsi innamar-va va
and 13th days with the Sun it is seen, and also the


yumu 28 innamar-va yumu 29 ina
28th day it is seen, and the 29th day at the


ta - mar - ti arkhi innamar - va
dawning of the month it is seen; and

23. [𒁹] 𒀀𒌋 𒄑 𒄑𒄑𒄑 𒄑 𒄑𒄑𒄑𒄑 𒁹 𒀀𒌋𒌋𒌋𒌋 𒁹𒁹𒁹 𒄑𒄑𒄑

ina yumu 20 Samsu is - rub ina lib Sin

on the 20th day the Sun glowed. In the place of the Moon

𒄑𒄑𒄑 𒁹𒁹𒁹 𒁹𒁹𒁹𒁹 𒀀𒌋𒌋𒌋𒌋 𒁍 𒄑𒄑𒄑𒄑 𒀀𒌋𒌋𒌋𒌋 𒀀𒌋𒌋𒌋𒌋𒌋𒌋𒌋𒌋

taru izarrikh pal yumi sadadi yumu 12

again it rises. A life of long days. The 12th day

𒁹𒁹𒁹 𒄑𒄑 𒄑𒄑𒄑 𒄑𒄑𒄑

itti Samsi innamar - va

with the Sun it is seen; and

24. 𒌋 𒁹𒁹𒁹 𒄑𒄑𒄑 𒁹 𒁹𒁹𒁹 𒄑𒄑𒄑𒄑 𒁹 𒄑𒄑 𒄑𒄑𒄑𒄑 𒀀𒌋𒌋𒌋𒌋 𒁹

nalbar-same ina la minati - su Samsu ics-ud ina

the zenith of heaven out of its reckonings the Sun attained. In

𒀀𒌋𒌋𒌋𒌋 𒁹𒁹𒁹 𒁹𒁹𒁹𒁹 𒄑𒄑𒄑𒄑 𒁹𒁹𒁹 𒀀𒌋𒌋𒌋𒌋 𒁍 𒄑𒄑𒄑𒄑 𒀀𒌋𒌋𒌋𒌋𒌋𒌋𒌋𒌋

lib sami taru izarrikh pal yumi sadadi

the midst of heaven it again mounts. A life of long days.

𒀀𒌋 𒄑𒄑𒄑𒄑 𒀀𒌋 𒄑𒄑𒄑𒄑 𒄑𒄑𒄑𒄑 𒁹𒁹𒁹 𒁹𒁹𒁹 𒄑𒄑𒄑

yumu 12 yumu 13 samu innamar

The 12th and 13th days the sky is seen.

25. 𒌋 𒄑𒄑𒄑 𒁹 𒄑𒄑𒄑𒄑 𒄑𒄑𒄑𒄑 𒄑𒄑𒄑𒄑 𒁹 𒄑𒄑𒄑 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹𒁹 𒁹𒁹𒁹𒁹 𒁹𒁹𒁹𒁹

Sin ina la minati -su innamar makhiru zakh- ir

The Moon contrary to its reckoned time is seen. The tariff is small.

𒀀𒌋 𒄑𒄑𒄑𒄑 𒀀𒌋 𒄑𒄑𒄑𒄑 𒄑𒄑𒄑𒄑 𒄑𒄑 𒄑𒄑𒄑 𒄑𒄑𒄑

yumu 12 yumu 13 itti Samsi innamar-va

The 12th and 13th days with the Sun it is seen; and

26. 𒌋 𒄑𒄑𒄑 𒁹 𒄑𒄑𒄑𒄑 𒄑𒄑𒄑𒄑 𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹𒁹 𒁹𒁹𒁹𒁹 𒁹[𒁹]

Sin ina la minati -su atalu isc - un - va

[to] the Moon, out of its reckoned time an eclipse occurred; and

sa 6 arkhi la sutrur - u va
for 6 months no clear sky; and [on] the

yumu 12 yumu 13 atalu issacan - va
12th and 13th days an eclipse takes place; and

27. Sin ina la a - dan - ni - su innamar makhiru
the Moon at an unexpected time is seen. The tariff

zakh- ir limut - tiv mati cali issac- an istu
is small. Evil all the land befalls. From

ip - tar - dhu pa - ra - dhu yumu 14
division division (?). The 14th day

la innamar yumu 15 yumu 16
it is not seen. The 15th and 16th days

innamar - va
it is seen; and

28. Sin ina la śi - ma - ni - su innamar sap - ikh
the Moon out of its time is seen. A smiting of

ali yumu 29 Sin innamar - va
the city. The 29th day the Moon is seen; and

29. Sin ina la śi -ma- ni -su ikh -khi- rav -va
the Moon out of its time was present, and

innamar ti - bi - e al -cis(sati) yumu 15
is seen. Campaigns against many cities: the 15*th day*

itti Samsi innamar- va
with the Sun it is seen; and

30. Sin ina la śi -ma- ni -su ikh -khi- rav -va
the Moon out of its time was present, and

innamar va yumu 16 itti Samsi innamar-va
is seen; and the 16*th day with the Sun is seen; and*

31. Sin ina tamarti-su karunu ibassi śarri
the Moon at its appearance horned is. The kings of

mati cali imatu sa yumu 14 itti
all the land die. On the 14*th day with the*

Samsi la innamar
Sun it is not seen.

32. Sin ina tamarti-su karunu adru melu
The Moon at its appearance (is) horned (and) dim. Floods

illi - cav sa yumu 14 itti Samsi innamar
descend. On the 14th day with the Sun it is seen.

e - di - ru sapal a - ma - ru
Light[1] *before daybreak.*

33. yumu 14 urruṭ - śu - nu a - kha - i
The 14th day their light together

innamar - va
is seen; and

34. Sin Samsa la yu - ci - va ir - bi na - an - dhur
the Moon the Sun does not face, and grows. Appearance of

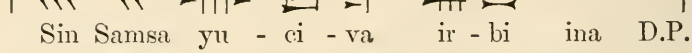
aryai u akhi sa yumu 14
lions and hyænas. On the 14th day

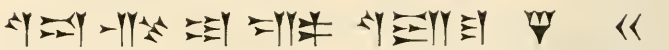
itti Samsi la innamar - va ina D.P. Samsi - eribi
with the Sun it is not seen; and at Sun-set

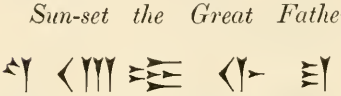
Sin ya - ʿadh - dhar - va
the Moon is on the right;[2] *and*

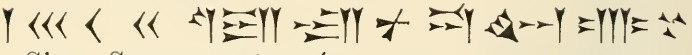
[1] This is a conjecture. In W.A.I. II, 25, 60, *aduruv* is given as a synonyme of *namaruv*, and *aduruv* may belong to the same root as *ediru* in this passage. *Ediru*, however, usually signifies "arranger" or "government."

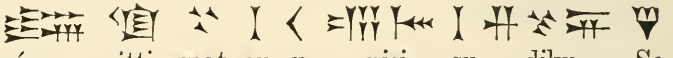
[2] I take this from Syllab. 724, where *nadhru* ("the protecting") is given as a synonyme of "the right hand."

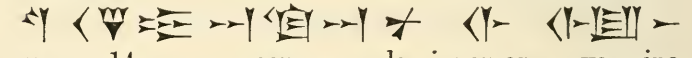
35. 
Sin Samsa yu - ci - va ir - bi ina D.P.
the Moon the Sun faces and grows. At

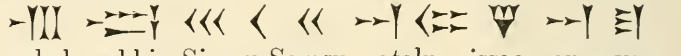

Samsi - eribi abu rabu urra isaccin Samsu
Sun-set the Great Father light makes The Sun,

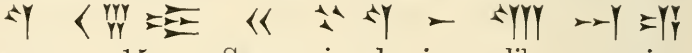

yumu 13 innamar - va
the 13th day, is seen; and

36. 
Sin u Samsu urrut - śu -nu .....
the Moon and the Sun their light combine.


śarru itti mat - su u nisi - su diku. Sε
The king with his land and his men are smitten. On


yumu 14 samu la innamar va ina
the 14th day the clear heaven is not seen; and in the


gabal arkhi Sin u Samsu atalu issac - an - va
middle of the month of the Moon and Sun an eclipse occurs; and

37. 
yumu 15 Samsu icsud ina lib sami
the 15th day the Sun has reached the midst of heaven.

Sin śamu yumu 14 la innamar
The Moon [is] misty. The 14th day it is not seen.

yumu 15 innamar - va
The 15th day it is seen; and

38. ..... su yut - takh - kha - ats limuttu
..... *his he has fought.* *Evil*

ibassi yumu 13 itti Samsi innamar - va
results. The 13th day with the Sun (the Moon) is seen; and

39. ..... ipp - ikh sibir mati
..... *it arose. The corn of the land [is]*

dumku yumu 14 itti Samsi innamar - va
flourishing. The 14th day with the Sun (the Moon) is seen; and

40. ..... makhiru zakh- ir yumu 15
..... *the tariff is small. The 15th day*

itti Samsi innamar - va
with the Sun (the Moon) is seen; and

41. ..... yumu 15 atalu issacan - va
..... *The 15th day an eclipse happens; and*

matu yuballidh yumu 14 itti Samsi la innamar
the land lives. The 14th day with the Sun (the Moon) is not seen.

42. ..... yumu 16 itti Samsi
..... *The 16th day with the Sun*

innamar - va
it is seen; and

43. ..... yumu 14 yumu 15
..... *The 14th and 15th days*

ina a - ri - e ka - bi
.....

The remaining lines of the Obverse are obliterated.

REVERSE.

1. ..... . Dayan - same ippakhkhir va
..... *[a setting] the star Ruler of Heaven gathers, and*

vâ śam - ut .. ina tuculti ....
also mistiness .. in service ....

2. .....tsalmu izz - iz tarbatsa[1] cacab Nam - makh
.....*dark is fixed. A setting the star of Mighty Destiny*

u cacab A - nu - ni - ta ....
and the star of Anunit [make] ....

3. ..... va cacab Al - lab ina lib - su izziz
..... *and the star Allab in its place is fixed.*

śar Acada - ci na ....
The king of Accad .....

[1] *Tarbatsu* is from the root רבץ "to lie down," or "rest."

4. ..... mar - ra - tuv ipakhkhir seum u
..... *the sea collects. Corn and*

sibru mar - ra - tuv Dayan - same
barley from the sea (through) Dayan-same.

tarbatsa Dayan - same ipakhkhir ....
A setting D. S. makes. ....

5. ..... [yumu] 1 tarbats atali Dayan -
..... *The 1st day the darkness of an eclipse. Dayan-*

same yumu 1 tarbatsa iddin - ni tarbatsa
same the 1st day rest gives. A setting

tamma ipakhkhir-va zunnu izanun va yumu 5
during the day it makes, and rain rains; and the 5th day

tarbatsa ipakhkhir ....
a setting makes ....

6. ..... tarbatsa raba itsabbit va tarbatsa
..... *great darkness seizes, and a setting*

la urpāta va ina tsit -su tarbatsa
without cloud; and at its rising darkness

ipakhkhir-va va yumu 5 ipakhkhir va
contracts, and also the 5th day it contracts, and

vâ atalu tarbatsa ipakhkhir-va
also an eclipse causes a darkness.

7. ..... ina yumu ruku tarbatsa ipkhar ina
..... *in former times a setting produced; in*

tammi arcuti sa arkhu Dūzu arkhu Abu u
future times, during the month Tammuz the month Ab and

arkhu Ululu
the month Elul (it will be the same).

8. Sin i a arkhi Adari ina tamarti-su tarbatsa
The Moon in the month Adar at its appearance a setting

ipakhkhir-va cacabu Ri'u-but-same ina
makes, and the star Shepherd of the Flock of Heaven in

lib-su izzaz ina arkhi Sivani atalu issac-an
its place is fixed. In the month Sivan an eclipse occurs.

9. Sin ina tsit-su 2 karni va
The Moon at its rising 2 crescents and the

utal urpāti yuma ipakhkhir atalu
shadow of a cloud during the day makes. An eclipse

issac - an - va ina śal - te seum ir - ru - ur
occurs and in heaps corn is blighted;

up - pu - lu issacan
a destruction is made.

10. .. yumu 13 lu yumu 14 .....
.. *the* 13*th day or the* 14*th day* .....

an - nu - ti tarbatsa ipakhkhir - va kharats
these (days) a setting makes, and the appearance of

atalu ta - kharrats
an eclipse creates.

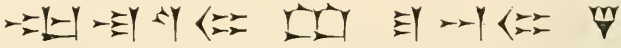
11. ina arkhi Niśanni yumu 27 tarbatsa
In the month Nisan, the 27*th day, rest (disappearance)*

ca - la im - mi ipakhkhir - va atalu issacan
all the day it makes, and an eclipse occurs.

ul i - se - edh
It does not move quickly (?)

12.

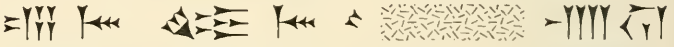
Ina arkhi Tasriti yumu 28 tarbatsa
In the month Tisri, the 28th day, disappearance



ca - la im - mi ipakhkhir - va atalu issacan
all the day it makes and an eclipse occurs.

13.

..... śu - bu - ra ipakhkhir mata rapasta ala
..... *darkness causes. A large land (and) city*

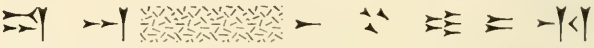


nisi ipassikhu ..... tarbatsu
men smite : ..... *the setting*

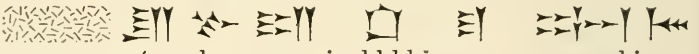
su - ut - ru - ru
(*is*) *white.*

14.

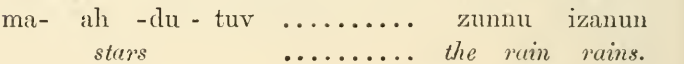
.... śu - bu - ra ipakhkhir - va rukh sūti
.... *darkness*[1] *contracts and southwards*



izzaz il (i) ..... ina mati i - tab - khu
is fixed. The gods ..... in the land .....

15. 

..... śu - bu - ra ipakhkhir - va cacabi
..... *darkness contracts, and many*



ma- ah -du - tuv ..... zunnu izanun
stars ..... *the rain rains.*

[1] Literally "a failing" or "eclipse." *Śubura* seems to be of Accadian origin, and is identical with *sabura*, one of the values of , which is rendered by the Assyrian *ezibu* "to leave" or "fail."

16. .... lu Samsu lu tarbatsa lu śubura
(*The Moon*) *or the Sun either a setting or darkness*

ipakhkhir-va tarbatsa ..... va zunnu izza-nun
causes, and a setting ..... and rain comes down.

17. Sin va - śubura tarbatsa .....
The Moon darkness[1] *and setting* (*causes*) ....

zunnu la izza-nun
the rain does not rain.

18. Sin tarbatsa yumu 7 yumu 14
The Moon a rest[2] *the 7th day, the 14th day,*

yumu 21 yumu 28 ipakhkhir-va kharats
the 21st day, the 28th day causes, and the appearance of

atalu ta-khav-ra-ats
an eclipse creates.

19. Sin tarbatsa ipakhkhir-va cacabu Cus-Marduc
The Moon a setting makes, and the star Brother of Merodach

.... ru-su izzaz pa-nu acalu acalu yum-cur
.... *is fixed. In the market (is) food: food (is) sold.*

[1] The Accadian usage is here adopted of prefixing the conjunction. The Accadian value of the ideograph is *amas*.

[2] The "rest" would here seem to mean "a holiday."

20. Sin tarbatsa cim anaka ipakhkhir . . . . . va
The Moon a setting like lead makes . . . . . and

D.P. Ramanu la irakhkhits mata es - rit
the Air-god does not inundate the land [and] the sanctuaries.

21. Sin tarbatsa utsurati ipakhkhir . . . . . seum
The Moon a setting on the horizon makes . . . . . wheat

u in - nu
and barley.

22 Samsu ina lib tarbatsi Sin izzaz matu calu
The Sun in the place where the Moon set is fixed. All the land

. . . . . cit - tav i - ta - mi
. . . . . *justice ordains.*

23. Sall - im cis - sa - ti Sin tarbatsa . . . . . .
Peace to multitudes. The Moon a setting . . . . . .

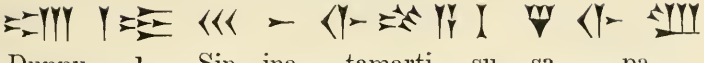
tarbatsu izzaz - ma
A rest is fixed accordingly.

---

24. Sin ina tamarti - su urpāta isaccin . . . . . va ina
The Moon at its appearance mist makes . . . . . and on

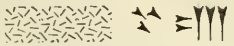
cuśśi la isallal
the throne he does not seize.

COLOPHON.

1. 

Duppu 1 Sin ina tamarti -su sa- pa

The 1st tablet (beginning) "The Moon at its appearance whiteness

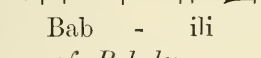


. . . . . .

2.

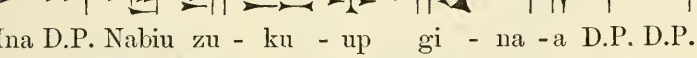
ci - i pi - i D.P. li -khu- śi duppi gab- ri

According to the papyri of the old tablets



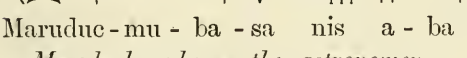
Bab - ili

of Babylon.

3. 

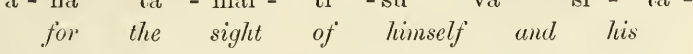
Ina D.P. Nabiu zu - ku - up gi - na -a D.P. D.P.

Through Nebo, the firm pillar,



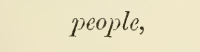
Maruduc - mu - ba - sa nis a - ba

Merodach-mubasa, the astronomer,

4. 

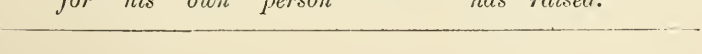
a - na ta - mar - ti -su va si - ta -

for the sight of himself and his



aś - śi - su

people,

5. 

a - na za - mar - ru an -ma

for his own person has raised.

W.A.I. 63 :—

OBVERSE.

The first line is gone; only the latter part of the second is preserved.

2. [illegible] [illegible]
. . . . . D.P. Nin - śi - sami it - pal - va
. . . . . *the planet Venus disappeared; and*

[illegible] [illegible]
yumu 2 D.P. Nin - śi - an - na
the 2nd day Venus

3. [illegible] [illegible]
. . . . . sana ibassu ub - bu - tu
. . . . . *for a year are. A destruction*

[illegible]
issac - an
takes place.

4. [illegible]
Ina arkhi Dūzu yumu 25 D.P.
In the month Tammuz, the 25th day,

[illegible]
Nin - śi - an - na ina D.P. Samsi-eribi it - pal
Venus at Sun-set disappeared.

5. [illegible]
yumu 7 ina Sami ikh -kha- rav - va
The 7th day in heaven it is visible; and

[illegible]
ina arkhi Abu yumu 2 D.P.
in the month Ab, the 2nd day,

[illegible]
Nin - śi - an - na
Venus

6. ina D.P. Samsi - atsi ittamar mie ina mati
at Sun-rise is seen. Waters in the land

ibassu up - pu - tu sa mi- . .
are. Beating of

---

7. Ina arkhi Adaru yumu 25 D.P.
In the month Adar, the 25th day,

Nin - śi - an - na ina D.P. Samsi-atsi it - pal
Venus at Sun-rise disappeared.

8. sana tucultu issacan khuratsu . . . . . .
For a year service continues. Gold is exchanged (?)

---

9. Ina arkhi yumu 11 D.P. Nin - śi - an - na
In the month . . . ., the 11th day, Venus

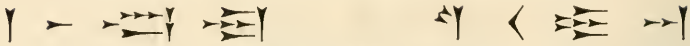
ina D.P. Samsi- eribi it - pal 9 arkha
at Sun-set disappeared. The 9th month,

yumu 4 ina same ikh -kha- rav - va
the 4th day, in heaven it was visible; and

10. ina arkhi Adaru yumu 15 ina D.P. Samsi - atsi
in the month Adar, the 15th day, at Sun-rise it

ittamar śarru ana śarra sallim-ma yum - ar
is seen. King to king peace sends.

---

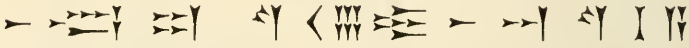
11. 

Ina arkhi Arakh - samna yumu 10 D.P.
In the month Marchesvan, the 10th day,

Nin - śi - an - na ina D.P. Samsi - atsi
Venus at Sun-rise

it - pal 2 arkhu yumu 6 ina sami
disappeared. The 2nd month, the 6th day, in heaven

ikhkhur
it appeared.

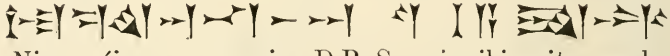
12. 

Ina arkhi Dhabita yumu 16 ina D.P. Samsi-eribi
In the month Tebet, the 16th day, at Sun-set

ittamar sibir mati esiru
it is seen. The crops of the land [are] prosperous.

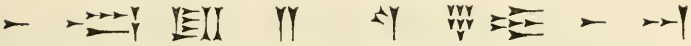
13.

Ina arkhi Ululu yumu 26 D.P.
In the month Elul, the 26th day,



Nin - śi - an - na ina D.P. Samsi-eribi it - pal
Venus at Sun-set disappeared.

yumu 11 ina Sami ikhkhur
The 11th day in heaven it appeared.

14. 

Ina arkhi Ululu sanitu yumu 7 ina D.P.

In the second Elul, the 7th day, at

Samsi-eribi ittamar lib mati dhabu

Sun-set it is seen. The heart of the land [is] good.

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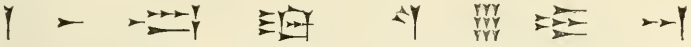
15. 

Ina arkhi Niśanni yumu 9 D.P.

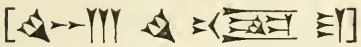
In the month Nisan, the 9th day,

Nin - śi - an - na ..... it - pal

Venus ..... disappeared.

5 arkhu yumu 16 ina Sami

The 5th month, the 16th day, in heaven



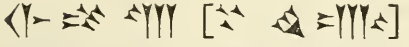
ikh - kha - rav - va

it reappeared; and

16.

ina arkhi Ululu yumu 25 ina D.P. Samsi-eribi

in the month Elul, the 25th day, at Sun-set



ittamar lib mati dhabu

it is seen. The heart of the land [is] good.

17.

Ina arkhi Airu yumu 5 D.P. Nin - śi - an - na

In the month Iyyar, the 5th day, Venus

ina D.P. Samsi-eribi ittamar ..... ina Sami
at Sun-set is seen ..... in heaven

ikhkhur - va
it appeared; and

18. ina D.P. Samsi - atsi ittamar sibir mati esiru
at Sun-rise it is seen. The crops of the land [are] good.

..... yumu 10 ina D.P. Samsi - atsi ....
[The month —], the 10th day, at Sun-rise ....

19. ina D.P. Samsi - atsi it - pal yumu 15
At Sun-rise it disappeared. The 15th day

ina Sami .... ina arkhi Sabadhu yumu 11
in heaven .... In the month Sebat, the 11th day,

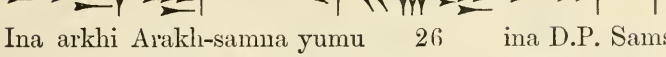
ina D.P. Samsi-eribi .....
at Sun-set .....

---

20. Ina arkhi Abu yumu 10 D.P.
In the month Ab, the 10th day,

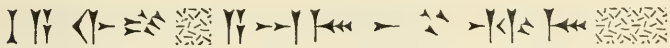
Nin - śi - an - na ina D.P. Samsi .....
Venus, at Sun- [disappeared].

1 arkhu yumu 16 .....
The 1st month, the 16th day, [it reappeared].

21. 

Ina arkhi Arakh-samna yumu 26 ina D.P. Samsi-

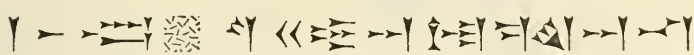
In the month Marchesvan, the 26th day, at Sun-set



eribi ittamar ... zunni ina mati ibassu ....

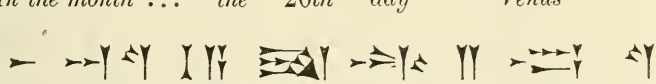
it is seen. Rains in the land are ....

---

22. 

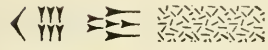
ina arakh ... yumu 20 D.P. Nin - śi - an - na

In the month ... the 20th day Venus



ina Samsi - eribi it - pal 2 arakh yumu

at Sun-set disappeared. The 2nd month,



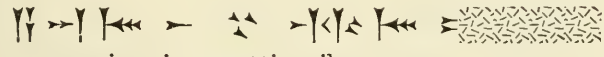
16 .....

the 16th day .....

23.

ina arakh ... yumu 4 ina Samsi - eribi ittamar

In the month ... the 4th day, at Sun-set it is seen.



zunni ina matti ibassu .....

Rains in the land are .....

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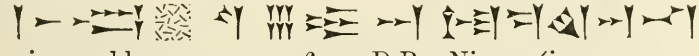
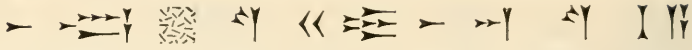
24. 

ina arakh ... yumu 6 D.P. Nin - śi - an - na

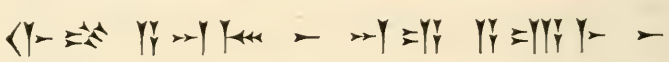
In the month ... the 6th day, Venus

ina D.P. Samsi - eribi it - pal yumu 15 ...

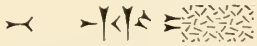
at Sun-set disappeared. The 15th day ...

25. 

ina arakh ... yumu 20 ina D.P. Samsi - eribi
In the month ... the 20th day, at Sun-set



ittamar zunni ina sami milammi ina
it is seen. Rains in heaven, floods in the



nakbi ibassu .....
channels are .....

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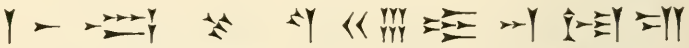
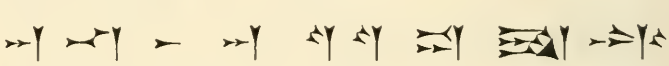
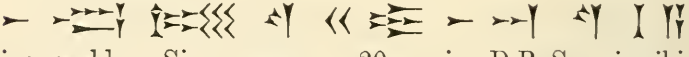
26. 

ina arakh Addari yumu 26 D.P. Nin - śi-
In the month Adar, the 26th day, Venus



an - na ina D.P. Samsi - atsi it - pal
at Sun-rise disappeared.

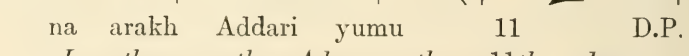
3 arakhu yumu 9 .....
The 3rd month, the 9th day .....

27. 

ina arakh Sivan yumu 20 ina D.P. Samsi-eribi
In the month Sivan, the 20th day, at Sun-set

ittamar ru - tiv tsab man- da ippakhkharu ....
it is seen. The forces of barbarian soldiery are collected ....

---

28. 

na arakh Addari yumu 11 D.P.
In the month Adar, the 11th day,

Nin- śi -an - na ina Samsi . . . . it - pal
Venus at Sun . . . . disappeared.

yumu 4 ina sami . . . . . .
The 4th day in heaven . . . . . .

29. . . . . sibirri irtsiti eśiri
. . . . . *The crops of the earth flourish.*

lib mati dh - ab
The heart of the land (is) good.

---

30. gab . . . . . din rakhatsu zunnu
. . . . . *inundation, rain,*

sal-gu . . . . . .
snow . . . . . .

---

31. ina arakh Niśanni yumu 2 D.P.
In the month Nisan, the 2nd day,

Nin - śi - an - na ina D.P. Samsi-atsi ittamar
Venus at Sun-rise is seen.

u - ru - ba - tuv ina mati ibassa
Deserts in the land are.

32. adi yuma 6 sa arakh Cuzalli ina D.P. Samsi-atsi
Up to the 6th day of the month Chisleu at Sun-rise

izz - az yumu 7 sa arakh Cuzalli
it is fixed. The 7th day of Chisleu

i -tab- bal -va 3 arakhu ina sami
it disappears, and after 3 months in heaven

33. ikh -kha- rav -va yumu 8 sa arakh
it appears; and the 8th day of the month

Addari D.P. Nin - śi -an - na ina D.P. Samsi-eribi
Adar, Venus at Sun-set

izarrikh-va śarru ana śarra nucurti yum - ar
rises; and king to king hostility sends.

---

34. ina arakh Airi yumu..... D.P. Nin - śi -an-na
In the month Iyyar, the .. day, Venus

ina D.P. Samsi-eribi ittamar nacarati ina mati
at Sun-set is seen. Hostile bands in the land

ibassa
are.

35. [adi yuma 7 sa] arakh Dhabiti ina D.P.
[*Up to the 7th day of*] *the month Tebet at*

Samsi-eribi izz - az yumu 8 sa arakh
Sun-set it is fixed. The 8th day of

Dhabiti i -tab- bal - va
Tebet it disappears; and

36. [yumu 7 ina sami] ikh -kha- rav - va
[*the 7th day in heaven*] *it appears; and*

yumu 15 sa arakh Dhabiti D.P.
the 15th day of Tebet,

Nin - śi - an - na
Venus

37. [ina D.P. Samsi] -atsi izarrikh - va sibirri mati
[*at Sun-*]*rise rises; and the crops of the land*

eśiri lib mati dh - ab
(*are*) *flourishing, the heart of the land* (*is*) *good.*

---

38. ina arakh Sivani yumu 4 D.P.
In the month Sivan, the 4th day,

Nin - śi - an - na ina D.P. Samsi - atsi
Venus *at* *Sun-rise*

ittamar rakhatsu ina(?) ma - at - ti
is seen. *An inundation in the land.*[1]

39. [adi yuma 8 sa arakh Sabadhi] ina D.P.
[*Up to the 8th day of the month Sebat*] *at*

Samsi - atsi izz - az yumu 8 sa arakh
Sun-rise it is fixed. *The 8th day of*

Sabadhi it -tab- bal -va
Sebat it disappears; and

40. [3] arakhu ina sami ikh -kha - rav - va
after 3 months in heaven appears; and

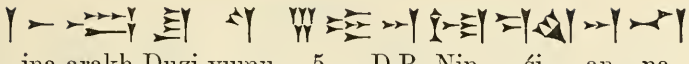
yumu 9 sa arakh Airi D.P. Nin - śi -an - na
the 9th day of the month Iyyar *Venus*

41. [ina] D.P. Samsi - eribi izarrikh - va nacarati ina
at Sun-set rises; and hostile bands in the

mati ibassa
country are.

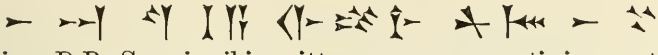
---

[1] Or, *eriv-va abu yuballadh,* "collects and the father lives"; or more simply, *rakhatsut matti* "inundations of the land."

42 

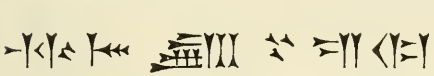
ina arakh Duzi yumu 5 D.P. Nin - śi - an - na

In the month Tammuz, the 5th day, Venus



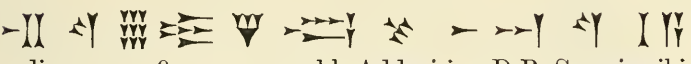
ina D.P. Samsi-eribi ittamar nacarati ina mati

at Sun-set is seen. Hostile bands in the land



ibassa sibirri mati eśiri

are. The crops of the land flourish.

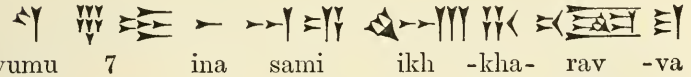
43. 

adi yuma 9 sa arakh Addari ina D.P. Samsi-eribi

Up to the 9th day of the month Adar at Sun-set

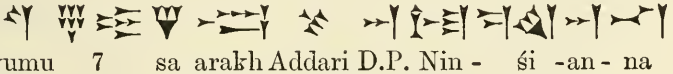
izz - az yumu 10 sa arakh Addari itabbal -va

it is fixed. The 10th day of Adar it disappears; and

44. 

yumu 7 ina sami ikh -kha- rav -va

the 7th day in heaven it appears; and



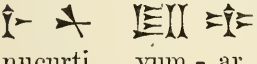
yumu 7 sa arakh Addari D.P. Nin - śi -an - na

the 7th day of the month Adar Venus

45.

ina D.P. Samsi - atsi izarrikh - va śarru ana śarra

at Sun-rise rises; and king to king



nucurti yum - ar

hostility sends.

REVERSE.

1. [ina arakh] Abi yumu 6 D.P.
[In the month] Ab, the 6th day,

Nin - śi - an - na ina D.P. Samsi - atsi ittamar
Venus at Sun-rise is seen.

zunni ina sami ibassu ub - bu - tu
Rains in heaven are. A beating

ibassi
takes place.

adi yuma 10 sa arakh Niśanni ina D.P. Samsi-atsi
Up to the 10th day of the month Nisan, at Sun-rise

izz - az yumu 11 sa Niśanni i - tab - bal - va
it is fixed. The 11th day of Nisan it disappears; and

3. 3 arakhu ina sami ittamar-va yumu 11 sa arakh
after 3 months in heaven it is seen; and the 11th day of the month

Dūzi D.P. Nin - śi - an - na ina D.P. Samsi-eribi
Tammuz Venus at Sun-set

4. izarrikh-va nacarati ina mati ibassa sibirri mati
rises; and hostile bands in the land are. The crops of the land

eśiri
(are) prosperous.

5. [ ] [ina] arakh Ululi yumu 7 D.P.
In the month Elul, the 7th day,

Nin - śi - an - na ina D.P. Samsi-eribi ittamar
Venus at Sun-set is seen. The crops of

sibirri mati eśiri lib mati dh - ab
the land flourish. The heart of the land (is) good.

6. adi yuma 11 sa arakh Airi ina D.P. Samsi-eribi
Up to the 11th day of the month Iyyar at Sun-set

izz - az yumu 12 sa arakh Airi
it is fixed. The 12th day of Iyyar

i -tab- bal -va
it disappears; and

7. 7 yu- mi ina sami ikh -kha- rav - va
after 7 days in heaven it reappears; and

yumu 9 sa arakh Airi D.P. Nin - śi -an- na
the 9th day of the month Iyyar Venus

8. ina D.P. Samsi -atsi izarrikh-va nacarati ina mati
at Sun-rise rises; and hostile bands in the country

ibassa
are.

9. ina arakh Tasriti yumu 8 D.P. Nin- śi -an- ıa
In the month Tisri, the 8th day, Venus

ina D.P. Samsi-atsi ittamar nacarati ina mati
at Sun-rise is seen. Hostile bands in the land

ibassa sibirri mati eśiri
are. The crops of the land flourish.

10. adi yuma 12 sa arakh Sivani ina D.P. Samsi-atsi
Up to the 12th day of the month Sivan at Sun-rise

izz - az yumu 13 sa arakh Sivani
it is fixed. The 13th day of Sivan

i -tab- bal -va
it disappears; and

11. 3 arakh ina sami ikh -kha- rav -va yumu
after 3 months in heaven it reappears; and the

13 sa arakh Ululi D.P. Nin - śi -an- na
13th day of the month Elul Venus

12. ina D.P. Samsi-eribi izarrikh-va sibirri mati eśiri
at Sun-set rises; and the crops of the land (are) prosperous;

lib mati dh - ab
the heart of the land (is) good.

13. ina arakh-samna yumu 9 D.P. Nin- śi -an- na
In Marchesvan, the 9th day, Venus

ina D.P. Samsi-eribi ittamar mata nestu dannatu
at Sun-set is seen. The land a strong woman

tatsab-bat
seizes.

14. adi yuma 13 sa arakh Abi ina D.P.
Up to the 13th day of the month Ab at

Samsi-atsi izz- az yumu 15 sa arakh
Sun-rise it is fixed. The 15th day of

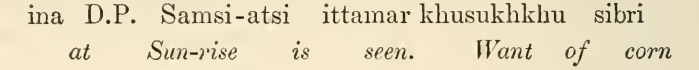
Abu i -tab- bal - va
Ab it disappears; and

15. yumu 7 ina sami ikh -kha- rav -va
the 7th day in heaven it reappears; and

yumu 11 sa arakh Dūzu D.P. Nin - śi -an- na
the 11th day of the month Tammuz Venus

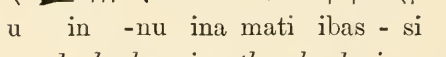
16. ina D.P. Samsi-atsi izarrikh-va nacarati ina mati
at Sun-rise rises; and hostilities in the land

ibassa sibirri mati eśiri
are. The crops of the land flourish.

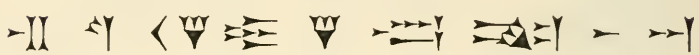
17. 

ina arakh Cuzalli yumu 10 D.P. Nin - śi -an- na
In the month Chisleu, the 10th day, Venus

ina D.P. Samsi-atsi ittamar khusukhkhu sibri
at Sun-rise is seen. Want of corn

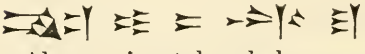


u in -nu ina mati ibas - si
and barley in the land is.

18. 

adi yuma 14 sa arakh Abi ina D.P.
Up to the 14th day of the month Ab at

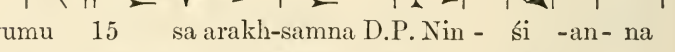
Samsi-atsi izz - az yumu 15 sa arakh
Sun-rise it is fixed. The 15th day of



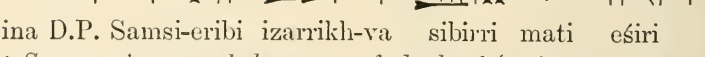
Abu i -tab- bal -va
Ab it disappears; and

19.

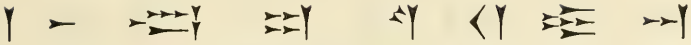
arakhi 3 ina sami ikh -kha- rav -va
after 3 months in heaven it reappears; and



yumu 15 sa arakh-samna D.P. Nin - śi -an- na
the 15th day of Marchesvan Venus

20. 

ina D.P. Samsi-eribi izarrikh-va sibirri mati eśiri
at Sun-set rises; and the crops of the land (are) prosperous.

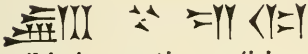
21. 

ina arakh Dhabiti yumu 11 D.P.

In the month Tebet, the 11th day,

Nin - si - an - na ina D.P. Samsi-eribi ittamar

Venus at Sun-set is seen.



sibirri mati eśiri

The crops of the land flourish.

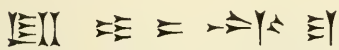
22.

adi yuma 15 sa arakh Ululu ina D.P.

Up to the 15th day of the month Elul

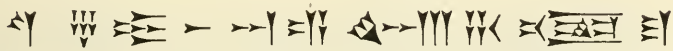
Samsi-eribi izz - az yumu 16 sa arakh

at Sun-set it is fixed. The 16th day of



Ululu i -tab- bal - va

Elul it disappears; and

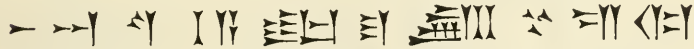
23. 

yumu 7 ina sami ikh -kha- rav -va

after 7 days in heaven it reappears; and

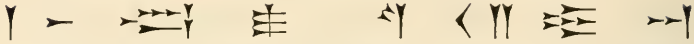
yumu 23 sa arakh Ululu D.P. Nin- śi - an - na

the 23rd day of the month Elul Venus

24. 

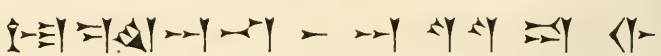
ina D.P. Samsi-eribi izarrikh-va sibirri mati eśiri

at Sun-set rises; and the crops of the land (are) prosperous.

25. 

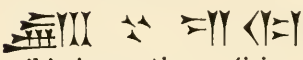
ina arakh Sabadhi yumu 12 D.P.

In the month Sebat, the 12th day,



Nin- śi -an- na ina D.P. Samsi - atsi ittamar

Venus at Sun-rise is seen.



sibirri mati eśiri

The crops of the land flourish.

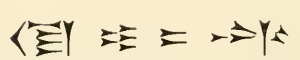
26.

adi yuma 16 sa arakh Tasriti ina D.P.

Up to the 16th day of the month Tisri at

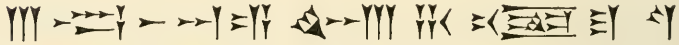
Samsi-atsi izz - az yumu 17 sa arakh

Sun-rise it is fixed. The 17th day of



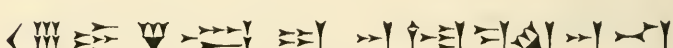
Tasritu i -tab- bal -va

Tisri it disappears; and

27. 

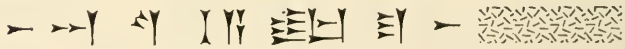
3 arakhu ina sami ikh -kha- rav -va yumu

after 3 months in heaven it reappears; and



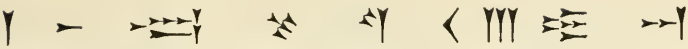
17 sa arakh Dhabitu D.P. Nin - śi -an- na

the 17th day of the month Tebet Venus

28. 

ina D.P. Samsi - eribi izarrikh-va .....

at Sun-set it rises; and .....

29. 

ina arakh Addari yumu 13 D.P.

In the month Adar, the 13th day,

Nin - śi - an - na ina D.P. Samsi-eribi ittamar

Venus at Sun-set is seen.

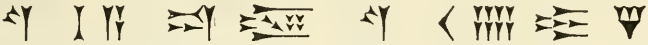
śarru .....

The king .....

30.

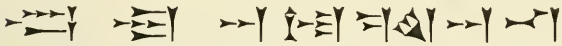
adi yuma 17 sa arakh - samna ina D.P.

Up to the 17th day of Marchesvan at



Samsi - eribi izz - az yumu 18 sa

Sun-set it is fixed. The 18th day of



arakh - samna D.P. Nin - śi - an - na

Marchesvan Venus

31.

yumu 7 ina sami ikh -kha- rav - va

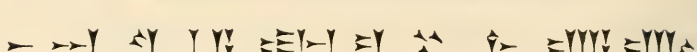
the 7th day in heaven it reappears; and

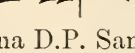
yumu 25 sa arakh - samna D.P.

the 25th day of Marchesvan

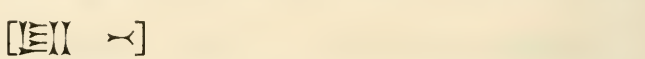
Nin - śi - an - na

Venus

32. 
ina D.P. Samsi-eribi izarrikh-va mata nestu dannatu
at Sun-set rises ; and the land a strong woman


[tatsab - bat]
[*seizes*].

33.
12 ci - its - ru - ta gab - ra - tuv sa D.P.
Twelve ancient observations[1] *of*


Nin - śi - an - na gab - ri Babili
Venus from Babylon.

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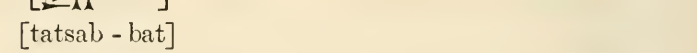
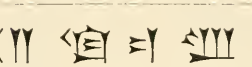
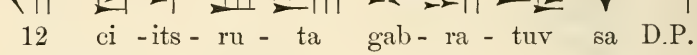
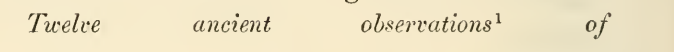
34. 
ina arakh Ululu 2 yumu 1 D.P.
In the 2nd Elul, the 1st day,

Nin - śi - an - na ina D.P. Samsi - eribi
Venus at Sun-set


it - [pal - va]
disappears ; and

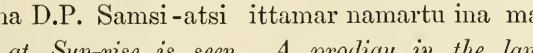
35. 
yumu 15 ina sami ittamar - va ina arakh
the 15th day in heaven it is seen ; and in the


Ululi 2 yumu 17 D.P. Nin - śi - an - [na]
2nd Elul, the 17th day, Venus

[1] Literally "collections" or "bodies of observations," from כצר.

36.

ina D.P. Samsi-atsi ittamar namartu ina mati .....
at Sun-rise is seen. A prodigy in the land .....



ibassi: ina ecalli gu .....
is: in the palace .....

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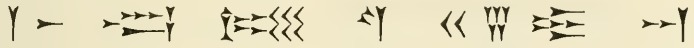
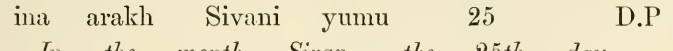
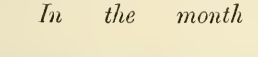
37. 

ina arakh Sivani yumu 25 D.P
In the month Sivan, the 25th day,



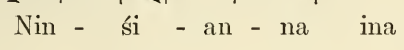
Nin - śi - an - na ina D.P. Samsi - atsi
Venus at Sun-rise



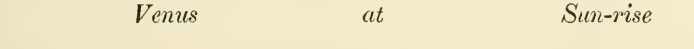
it - pal .....
disappears .....

38

2 arakhu yumu 6 ina sami ittamar-va ina
after 2 months, the 6th day, in heaven it is seen; and in the



arakh Eluli yumu 24
month Elul, the 24th day,

39. 

D.P. Nin - śi - an - na ina D.P. Samsi-eribi ittamar
Venus at Sun-set is seen.

lib mati dh - ab
The heart of the country (is) good.

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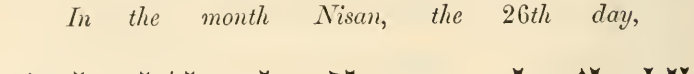
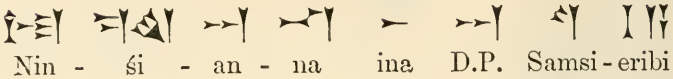
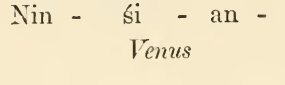
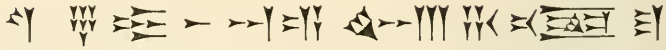
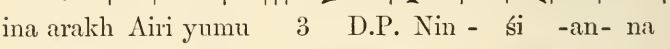
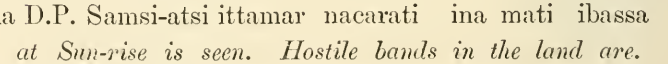
40. 
ina arakh Niśanni yumu 26 D.P.
In the month Nisan, the 26th day,

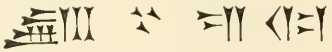

Nin - śi - an - na ina D.P. Samsi - eribi
Venus at Sun-set


it - pal - [va]
disappears ; [and]

41. 
yumu 7 ina sami ikh -kha- rav -va
after 7 days in heaven it reappears ; and


ina arakh Airi yumu 3 D.P. Nin - śi -an- na
the month Iyyar, the 3rd day, Venus

42. 
ina D.P. Samsi-atsi ittamar nacarati ina mati ibassa
at Sun-rise is seen. Hostile bands in the land are.


sibirri mati eśiri
The crops of the land (are) prosperous.

43.
. . . . . D.P. Nin - śi - an - na ina
. . . . . *Venus at*

D.P. Samsi-atsi it - pal - [va]
Sun-rise disappears ; and

44. [illegible] [illegible]
..... [ina] arakh Addari yumu 28
..... [*in*] *the month Adar, the* 28*th day,*

[illegible]
D.P. Nin - śi - an - na
Venus

45. [illegible] [illegible] [illegible]
..... śarru ana śarra
..... *king to king*

[illegible]
nis - carara yusapp - ar
an ambassador sends.

The two following lines, which complete the tablet, are broken off.

ADDENDA.—*Taśukhtu* is a synonyme of *talidtu* "offspring" or "produce," in W.A.I. II, 47 10.

TRANSLATION

OF A

FRAGMENT OF AN HISTORICAL NARRATIVE RELATING TO THE REIGN OF TOTHMES III.

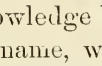
From a Papyrus in the British Museum.

By C. W. Goodwin, M.A.

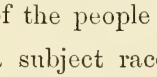
Read 3rd March, 1874.

Amongst the papyri lately acquired by the British Museum from Miss Harris, is one of which the contents are of more than ordinary interest. Unfortunately it is imperfect at both ends, and is besides much rubbed and broken. It is written on both sides, each side containing eight pages of from ten to sixteen lines. The handwriting is neat and careful, and belongs probably to the XIXth dynasty. The side which is best written, and the least worn and frayed, and which I shall call the front, contains songs, principally of an amatory character, forcibly reminding us of the style of the Song of Songs. The first three pages on the back are the conclusion of an historical narrative, relating to an incident in the reign of Tothmes III. The remaining five pages on this side form the commencement of a tale of wonder in the style of the story of the Two Brothers. Were this papyrus perfect, we should have a magnificent addition to our store of old Egyptian literature. We must content ourselves for the present with the fragments which have escaped destruction, and with the indulgence of a hope that some other portions of the papyrus may hereafter turn up, which is quite possible.

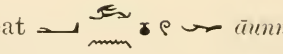
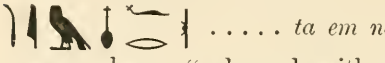
The present paper is devoted to the first three pages on the back of the papyrus, which relate to the reign of Tothmes III.

We appear to have before us the account of the taking of a fortress belonging to a people called  , Imu, a name which has not to my knowledge been met with elsewhere in Egyptian texts. This name, which occurs in our papyrus four times, is in no case perfectly complete and distinct; but if my reading be right, it would seem to be identical with אֵימִם, Emim, the name of a powerful tribe who anciently inhabited the country in later times occupied by the Moabites (Deut. ii, 10, 11). These people are mentioned in Genesis xiv, 5, as having sustained a defeat at the hands of Kedor-laomer, the king of Elam. According to Deuteronomy they had disappeared at the time of the migration of the Israelites into Canaan, and their country had fallen to the children of Lot, that is, the Moabites.

In the first page the beginnings of all the lines are wanting, so that the thread of the narrative is completely broken. We find mention made of a certain Tahutia who appears to be an Egyptian officer; but we find him in close relations with the Imu, apparently in their fortress, and in their confidence. The story ends in his betraying the city and its inhabitants into the power of the king of Egypt.

In this page also mention is made of the people called  , Apura, known as a subject race, employed in quarrying stone in the reign of Ramses II, and as late as that of Ramses IV. These people are considered by M. Chabas to be no other than the Hebrews, whose name, עברים, coincides almost exactly, the only change being that of ב into *p* (See Chabas, Mélanges Égyptologiques, 1862, pp. 42—54). This highly plausible identification, although not definitively accepted by Egyptologists, is certainly entitled to great consideration; and, if correct, it adds much to the interest of our papyrus. Unfortunately it is not possible to determine completely the part played by the individual belonging to this people who is mentioned in our papyrus, and whether he was in the service of the Imu, or of the king of Egypt.

We find also in the first page mention of an object

called the great  *āunnu* of King Tothmes III, which had a special surname, of which only the latter part  . . . . . *ta em nefer*, remains. The meaning was, perhaps, "adorned with beauty." The word occurs elsewhere (see Chabas, Voyage d'un Égyptien, p. 119), and is thought to mean a flexible stick, used for castigation. The name was also that of the tree from which such sticks were cut, and which was a product of the land of Kharu or Syria. We may suppose the great *āunnu* of King Tothmes to have been a rod of more than usual dimensions, carried, perhaps, with the armies of the conqueror, as a symbol of the castigation which his enemies might expect.

This narrative is written in a prosaic and easily intelligible style, which makes its fragmentary state the more regretable. A few new and obscure words occur, of which the meaning can be only guessed approximately. I shall place my remarks upon these in the notes appended to the translation.

Harris Papyrus 500, verso.—Translation.

Page 1.

LINE

1. . . . . as was done to the barrels (1)
2. . . . . Tahutia (2) . . . . the *auāi* (3) of the king
3. . . . . against them. Now it came to pass that after their hour of drinking, (4) Tahutia said to
4. . . . . with the women and children of thy own town. Do thou conduct the
5. . . . . their fodder; or else let one of the Apura ride out (5)
6. . . . . let the horses be tethered, (6) let fodder be given to them, let
7. . . . . King Men-Cheper-Ra (Tothmes III); let them go and report . . . . Now it came to pass
8. . . . . said to Tahutia: "My desire is to see the great Rod (7) of King Men-Cheper-Ra

LINE

9. . . . . (adorned) with beauty by name." (He replied?) "By the name (8) of King Men-cheper-ra, thou shalt to-day
10. . . . . ." He did accordingly; he brought the Rod of King Men-cheper-ra
11. . . . . his garment. (9) He stood raising it up, saying, "Look now at me, ye base
12. (Imu) . . . . King Men-cheper-ra, the furious lion, the son of Seχemt, whom his (father) Amen has placed
13. . . . . he shall smite and cut down the base Imu, he shall fall upon

Page 2.

1. . . . . before him . . . . . the skins (10)
2. He . . . . . the works (11) of the
3. base Imu." He put the *teb* (12) of four jars (13) in the mouth of his magazine. (14) He caused to be brought
4. the 200 vessels, (15) which he had put . . . . He caused the 200 soldiers (16) to mount
5. upon them. They filled their pockets (17) with cords and collars; they bound them
6. with bonds; there were given to them their *khabu* (18) together with their
7. garlands of flowers. They accoutred all the good soldiers with them . . . . to (?).
8. It was said unto them, "When ye come to the town, ye shall liberate your
9. companions, (19) so that I may seize upon all the men who are in the town, and ye shall put them in bonds
10. at once." (20) It shall be said to the lieutenant of the base Imu, "Fallen is thy
11. lord, go now say to thy comrades, (21) 'May it please you, (22) let us give up (?) Tahutia, with his wife and his children.'"
12. Behold, it happened, they performed as was desired, (23) with regard to the 200 vessels which were full of men

LINE

13. and collars and cords. He went before them to conciliate his comrades,
14. saying, "Let us seize upon Tahutia." They opened the fastenings of the town before the soldiers.

Page 3.

1. When they came to the town, they
2. liberated their companions; they seized upon the
3. town, both small and great. They put on the
4. cords and collars immediately. The
5. mighty power of the King seized upon the town
6. (where) Tahutia lay. He sent a message to Egypt to
7. King Men-cheper-ra, his lord, saying, "May it please
8. thee, Amen thy good father hath given unto thee the base
9. Imu and all his men, as well as his
10. town. Send now men to take them
11. in charge, and fill the house of thy father Amen, king of gods,
12. with men-servants and woman-servants. May they be prostrate beneath thy feet
13. for ever and ever." Finished happily, and dedicated to
14. the Scribe . . . . . .

The dedication is unfortunately imperfect. It would have given us probably the name of the author of this piece.

The narrative, although obscure in details, will explain itself sufficiently to the reader, and I can add nothing to make it more clear.

Notes to Translation of Harris Papyrus 500, verso, Pp. 1, 2, 3.

(1) *Barrels.* The word is *hotepu*, an Egyptian dry measure. Brugsch Lex. p. 1008.

(2) *Tahutia.* the name of the Egyptian officer, who appears to be the hero of the narrative. The name might be transcribed Tetia, or Thotha, but we know now that the real phonetic spelling of which the Greeks transcribed *Θωθ*, *Θωυθ*, and *Τεθ*, was Tahuti.

(3) *Auāi.* a class of employés whose functions are not exactly defined. See remarks upon this subject in Chabas, Mélanges Égyptologiques, 3rd Series, Tome i, p. 14.

(4) *Drinking.* This word probably means bathing as well as drinking. (1 Sall. 7, 7.) One cannot decide which sense it has here.

(5) *Ride out.* *senni.* The Senni were mounted troops, who were employed as scouts. The verb *senni*, means to make an excursion on horseback.

(6) *Tethered.* The word appears to be *χefiu*, which is unknown to me, and of which I only guess the sense.

(7) *Rod.* *āunnu.* See Chabas, Voyage d'un Égyptien, pp. 116, 119.

(8) *By the name*, &c. A form of oath. See Brugsch, Lex. p. 345.

(9) *Garment.* The word seems to be , a garment of some kind, the nature of which has not yet been determined. It occurs 4 Anast. 3, 1; 5 Anast. 23, 4, and elsewhere.

(10) *Skins.* *taherau.* Brugsch Lex. 1656. The hides of animals, used in some warlike operation.

(11) *Works.* A half obliterated word; perhaps meaning possibly agricultural labours of some kind. See 2 Sall. 4, 9; 1 Anast. 1, 8.

(12) *Teb.* I cannot make out the determination of this word; and the reading *teb* is uncertain. The word is masculine, having the article *pa.* From what follows, I conjecture it to be some warlike implement.

(13) *Jars.* The word is *nemms,* determinative uncertain. It means a pot or jar. Brugsch Lex. p. 767, line 20.

(14) *Magazine.* The words appear to be *em ra tebhu-f.* Concerning *tebhu,* meaning a collection or magazine of warlike implements, see Brugsch in Zeitschrift, 1871, p. 9. The translation of this passage is in the highest degree uncertain. All that one can be sure of is that it describes some military operation or stratagem.

(15) *Vessels.* *taχbusata.* The word occurs again, same page, line 12. The determinative indicates a vessel or bundle of some kind. The word looks like an Asiatic one; a verbal form, perhaps, from חָבַשׁ, *khabash,* to bind up. The number of these objects mentioned is uncertain, but seems to be 200 or more.

(16) *Soldiers.* *nāu.* A word of frequent occurrence; perhaps a foot-soldier. Brugsch says, officer or captain. The phrase , lit. "fall upon their mouths," may mean either mount upon

them, or enter into them. Without knowing exactly what the *taχbusata* were, it is impossible to say what is meant.

(17) *Pockets.* (?) *kanau*, lit. bosom, lap, cords *maχa*. See 5 Anast. 17, 1. Collars *kaha*. This word is found in the Horus Myth Inscription from Edfu, published by M. Naville, plate xv, col. 7, spelled thus . The word means "wooden collars," to be fastened round the necks of prisoners. The word *maχa* or *maχai* is also used in the Horus Myth for the cord with which Horus binds his enemy.

(18) *Khabu.* The word appears to be ; but the first letter is highly doubtful. Some implement is meant.

(19) *Companions.* . The word , to open, seems to mean to liberate from bonds. *Naiu-teu ari*, may mean "one another." Copt. ⲛⲉⲧⲉⲛ ⲉⲣⲏⲩ. It would appear that these soldiers were sent bound, as if captives, to the enemies' town by way of stratagem. They were to release one another, and then fall upon the townspeople and bind them.

(20) *At once.* I can suggest no better meaning, but have grave doubts if this be right. is the usual word for "at once."

(21) *Comrades.* , *Tai-k sennut.* The word *sennut* or *shennut*, perhaps identical with *shennu* (Brugsch Lex. p. 1396), is here determined by the female figure , and appears to be a collective noun, meaning the whole body of sennu or comrades.

(22) *May it please you.* Thus I translate the expression , which occurs again, page 3, line 7, and is literally "gracious," "kind," used just like the German *gefälligst.*

(23) *Desired.* The translation here is very doubtful. The words appear to be , &c.

TRANSLATION

OF

A FRAGMENT OF A FABULOUS TALE.

From an Egyptian Papyrus in the British Museum.

By C. W. Goodwin, M.A.

Read 3rd March, 1874.

The Harris Papyrus 500, from which I have already taken the historical fragments relating to Tothmes III, contains in the last five pages, on the reverse side, a fragment of a tale of the same class as that of the Two Brothers, which has long been familiar to Egyptologists. The style is that of a child's book, quite prosaic and unadorned, and remarkably easy to translate.

The period to which the tale relates is quite vague. A king of Egypt and a prince of Naharanna or Mesopotamia are mentioned, but without the least hint of their names or dates. The scene lies sometimes in Egypt, sometimes in Mesopotamia, but there seems no intention to fix anything definitely, any more than there is in the faërie tales of our own times. This story and that of the Two Brothers, are the prototypes of the prose romance, a mere string of marvellous adventures, destitute of all poetic colouring. Whether this kind of composition was first produced in the XIXth dynasty, that is about the time of the Hebrew Exodus, or whether earlier specimens existed, we have no materials at present for determining. But certainly their style is far less elevated than that of the story of Saneha, and the tale of the Injured Gardener, which belong to the XIIth dynasty, and they read like the productions of a less serious and poetical age.

The story I am about to translate is, as before said, a mere fragment, contained in five pages, and one is led to

speculate upon the original length. The story of the Two Brothers is in nineteen pages, but I doubt whether the present tale can have been equally long. The plot is simple. A young prince is born, of whom the Hathors or fairy godmothers, who attend his birth, foretell that he will die by one of three deaths, either by means of a crocodile, a serpent, or a dog. The young prince is immured by his father's order, with a view of shielding him from danger, but he one day catches sight of a dog, and wishes to have one. This desire is granted, rather imprudently it would seem, but probably the dog provided for him was one considered of a species not dangerous, and this animal became his faithful companion. When arrived at manhood, he petitions to be allowed to go out and see the world. The king accedes to this, and the young man goes with his dog to Mesopotamia. The king or prince of this country has an only daughter, whom he has shut up in a lofty tower, of which the window was many cubits from the ground; the sons of all the neighbouring princes have been invited to scale this tower, with the promise that whichever succeeds in reaching the princess's window shall have her as his wife. The young Egyptian joins this band of suitors, and eventually proves successful. The process by which the window was reached is rather obscure; the word expressing it is ▬ ꝯ ⸸⸸ *pui*, a word which occurs elsewhere with the determinative of a bird's wing, and then means "to fly." Here it appears to be determined only by a vague sign, perhaps answering to the hieroglyphic ⸺ which means nothing. As it is difficult to believe that the young princes had flying apparatus, I have preferred to venture upon the word "climb." If the papyrus were not mutilated here, we might perhaps decide with certainty. The Egyptian prince talks about using enchantment, or invoking the aid of some god, perhaps Thoth, and it is not impossible, in a marvellous tale of this kind, that flying may be really meant. Whether by climbing or flying, he reaches the princess's window, and after some difficulties arising from his supposed obscure parentage, he marries her. After this he goes to Egypt to hunt, and meets with an adventure with a crocodile and a giant, the nature of which it is impossible

to determine, but the prince escapes without hurt; he next runs in danger of a serpent, who approaches to bite him while he lies asleep; this enemy is, however, despatched by his wife. After this the crocodile and giant are introduced again, but here unfortunately the manuscript breaks off; one cannot help guessing that after all the faithful dog will be the cause of his death. Considering the rapidity with which the story is developed in the five pages which we have, it may be presumed that not more than five others would be needed to bring about the catastrophe.

The seven Hathors who attend at the birth of children, and predict their future fate, are mentioned also in the tale of the Two Brothers, where they unanimously foretell a violent death to the woman who was formed by the creator Chnum to be the wife of Batau. These mysterious beings are the prototypes of the Parcæ or Fates of the ancients. In the CXLVIIIth chapter of the Book of the Dead, they are represented as cows, and their names are given at length.

Harris Papyrus 500, verso.—Translation.

[*The words in parentheses supply the lacunæ of the text from conjecture.*]

Page 4.

LINE

1. It is told (that there was once) a king, who had no male offspring. (He prayed for an heir) and the gods listened to his request.
2. They decreed that one should be born to him. He lay with his wife in the night, and behold (she became) pregnant. She completed the month
3. of parturition, and then brought forth a male child. When the Hathors (Parcæ) came to greet him at his birth, they said
4. that he would die either by a crocodile, a serpent, or by a dog. When the people who were about the child heard it, they went (and told) these
5. things to His Majesty. His Majesty was exceedingly grieved at the evil tidings. His Majesty gave orders (to shut the child up in) a house

LINE

6. in the country, provided with attendants and all kinds of good things from the king's palace, and that the child should not go out abroad. (Now it came to pass
7. after some time) when the child grew big, he ascended to the roof of the house, and he saw a dog, which was following a person who
8. was going along the road. He said to his attendant, who was beside him, "What is that which (follows the person going along) the road." He
9. said to him, "That is a dog." The child said to him, "Let one be brought to me like it." The attendant went and repeated these things
10. to His Majesty. His Majesty said, "Let there be got for him a boar-hunting dog, to run before him." Then they got for him
11. a dog. Now it came to pass some time after this, the child became like a prince, in all his limbs. He
12. sent to his father, saying, "Why is it that I still remain shut up. I am destined (to die by one of three deaths . . . . . .)
3. . . . . Let God do whatsoever pleases him." He went and . . . . . .

Page 5.

1. all kinds of weapons . . . . . to serve him. The man conducted him to the East.
2. He said to him, "Go now whithersoever thou wilt." He went off) and the dog with him. He went up to the country according to his will, he lived upon the best of
3. all the beasts of the field. He arrived at the country of the prince of Mesopotamia (Naharanna). Now there was no child of the prince of
4. Mesopotamia, excepting one daughter. He had built a house for her, of which the window was distant
5. . . . . cubits from the ground. He had sent for all the sons of all the princes of the land of Syria (Chara), and said to them,
6. "Whoever shall scale the window of my daughter, she shall be his wife." It came to pass many days after this,

LINE

7. while they were engaged in their daily occupations, the youth rode up to them. They
8. received the youth into their house, washed him, they gave fodder to his
9. horse, they did all sorts of things for the youth. They lodged (?) him, they shod (?) his feet, they
10. brought him to their . . . . . they said to him in the way of conversation, "Whence comest thou,
11. thou good youth?" He said to them, "I am the son of one of the horsemen of the land of Egypt. My mother died, and my
12. father took another wife, a step-mother. Thereupon she hated me, and I fled from before her." He
13. was silent (?). They kissed him . . . . . He said to the
14. youths, "What shall I do . . . . . " (they tell him about the daughter of the king of Mesopotamia).

Page 6.

1. . . . . to scale the window of the tower. Now it came to pass many days after this . . . . . .
2. . . . . he said to them, "Do ye go out; I will call (or conjure some deity?). I will go to climb
3. among you." They went to climb, according to their custom every day. The youth
4. stood afar off looking on. The maid-servant (?) of the daughter of the prince of Mesopotamia was upon it (the tower?). Now it came to pass some time after this,
5. the youth went to climb with the children of the princes; he climbed
6. and he reached the window of the daughter of the Prince of Mesopotamia. She kissed him, she embraced him in
7. all his limbs Some one went to congratulate her father, and said to him, "A man has scaled the window
8. of thy daughter." The prince inquired about him, saying "The son of which of the princes is it?" They said to him,

LINE

9. "It is the son of a horseman, who has run away from the land of Egypt, (from the face) of a step-mother." The
10. prince of Mesopotamia was exceedingly angry. He said, "How can I give my daughter to a runaway
11. from Egypt. Let him go back again." They went and said (to the youth, "Go back) to the place from whence thou camest."
12. But the girl clung to him. She swore by God, saying, By the name of the Sun, Horus, (if I am prevented) from keeping him
13. with me, I will neither eat nor drink." She was on the point of dying. A messenger
14. went to announce all that she had said to her father. The prince sent men to slay him (the youth).
15. He was in his house. The girl said, "By the Sun, if he is slain ..... I will die too,
16. I will not pass an hour of life (without) him." One went (and told all these things) to her father. (The prince of Mesopotamia causes the youth to be brought to him).

Page 7.

1. (The result is favourable) ..... The fear of him
2. came upon the prince. He embraced him, and kissed him in all his limbs. He said to him, "Behold thou art
3. unto me as a son." He replied to him, "I am the child of a horseman of the land of Egypt. My mother died, my father took
4. to himself another wife ..... she hated me. I ran away from before her." He gave him his daughter to wife. He
5. (gave him a handsome establishment.) Now it came to pass some time after this, that the youth
6. said unto his wife, "I am predestined to one of three deaths; either by a crocodile, a serpent, or a dog." She said to him, "Let
7. (some precautions be taken)." He replied, "I will not cause my dog to be killed. How should he do it?"

LINE

8. The woman (urged) her husband greatly. He would not allow him (the dog?) to go out alone.
9. (He goes a journey to some place) in the land of Egypt to catch birds. Behold a crocodile
10. (probably a sacred animal), he was at the door of his house in the village, in which the
11. (youth had formerly dwelt). Behold there was a giant by him. The giant did not suffer him to go out.
12. . . . . (he shut up) the crocodile. The giant went out to walk. Now when the dawn
13. appeared (the youth) went . . . . . every day for the space of two months. Now it
14. came to pass some time after this, that the youth was sitting and making a feast in his house. Now it happened that
15. when night approached, the youth lay down upon his mat, and sleep overcame his limbs.

Page 8.

1. His wife was engaged in (some occupation connected with the bath). (There came a serpent)
2. from a hole to bite the youth. Behold his wife was sitting beside him; she was not reposing. Then the (servants came and presented something, probably wine)
3. to the serpent. He drank of it to intoxication. He lay down overcome. (The woman kills him and throws him)
4. . . . . into her bath. Then they awoke her husband (and told him what had happened).
5. She said to him, Behold thy God hath given one of thy dooms into thy hand. He proceeded to make
6. offerings to God, to worship him, and exalt his presence, every day. Now it came to pass some time after this,
7. the youth went out to walk, at a distance from his dwelling. He did not . . . . . .
8. Behold his dog followed him. His dog seized the head of (some animal)

LINE

9. He began to run (after) him, he approached (a place near) the sea. He proceeded to the .....
10. the dog was standing (near) the crocodile. He led him to where the giant was .....
11. the crocodile (said) to the youth "I am thy doom, I am come after thee .....
12. ..... with the giant. But, behold, I will remember (?) thee .....
13. ..... thou mayest bewitch me (like) the giant. But if thou seest ....."
14. ..... Now it came to pass after two months that (the youth) went .....

[*Here ends the fragment.*]

ADDENDA TO PAPER ON THE "DESCENT OF ISHTAR."

By H. F. Talbot, F.R.S., &c.

I stated in the first page of this article that the word *Nin* meant both '*Lord*' and '*Lady*,' as I have already explained in my Assyrian Glossary No. 419; of which I will offer a few proofs.

In 2 R 58, 56 the god [illegible] or *Hea* is called the Nin (or Lord) of the Bright Face (or Bright Eye) [illegible]. *Nin* being written [illegible] in col. 1, but [illegible] in col. 2.

Another title of the same god (in line 58) was [illegible] *Nin-it-gal* 'Lord of the strong hand.' He was the "god of battle," when he had this epithet. More usually, he was the god of the Ocean, and in that quality he was called (see line 62) *Nin bubu*, where *Nin* is written [illegible] in col. 1, but [illegible] in col. 2. This is explained in col. 4 to mean "the god of sailors," where sailors are called (as in other passages) [illegible] "men who go in ships." Other similar titles are attributed to him in lines 63, 67, 73. Hence it is evident that *Nin* signified a *Lord*. Besides, we have the great deity *Nin-ib* whose name probably signifies 'Lord of brightness.' He was the Assyrian Hercules and sometimes the Meridian Sun. I now come to the opposite meaning of *Nin*, 'a Lady,' which as far as I have observed, is always written [illegible]. It occurs very frequently. It is often put in opposition to [illegible] *Bil* (Dominus). Thus in my glossary No. 367 I have mentioned the *Bil* and *Nin* (god and goddess) of knowledge. But on some of the tablets are long lists of deities, given in pairs, the *Bil* and the *Nin* of each kind.

𒀭𒊩 also means a Wife. *Ex. gr.* Tarku king of Egypt died. *Arkinu Urdamani tar nin-su as guza-su usib,* "afterwards Urdamani the son of his wife sat upon his throne." (Smith's Assurbanipal, p. 47).

𒀭𒊩 or *Nin* is sometimes a "Woman," *ex. gr. Nin khisakhti hekali-su malabasū,* all the favourite women of his palace (*ibid.* p. 200).

In col. 1, line 20 I have translated 𒁹𒁹 𒁹 𒄩𒁺𒌋 𒁹𒁹 *imahidu* 'they shall prey,' from the root עדא præda. In confirmation of this see the cylinder of Esarhaddon col. 1, 23, where the word is used again. [All the treasures of his palace] I carried off as my spoil, *ana muhadi aslula,* written 𒁹𒁹 𒄩𒁺𒌋 𒁹𒁹𒁹𒁹 𒁹𒁹𒁹.

In col. 1, 34 and the two following lines, *lupki* may be from בכה to weep, howl, lament: flere, ejulare. "Let her lament, along with other spirits in torment."

In col. 2, line 1 Dr. Schrader[1] thinks that the messenger of evil news only prostrated himself before the gods, and that he did not lacerate his face: taking the word *guddut* to be the Hebrew קדד and not גדד. This opinion is very probable, because קדד is followed by אפים "the face," just as in our present passage we read *guddut appa-su.*

In col. 2, line 7 *Burti* 'a Cow' is correctly referred by Dr. Schrader to the Heb. פרת, which Fürst renders 'a heifer, or young cow,' and compares it to the Greek πορτις, as I had done before consulting his work.

In the same line Dr. Schrader reads 𒁹𒁹𒁹𒁹 𒁹 𒁹𒁹𒁹 as *ugarra* and not *usara.* In this he is doubtless right: the verb is the Chald. גר or גור *gur,* coire. See Schindler's Lex. p. 300. And in the same line the verb *isukkhit* is probably formed from *sukhit,* Heb. שוקת desiderium, libido. In Genesis iii, 16; iv, 7 and Cant. vii, 11 we find the derived noun *tasukhit* תשוקת of the same meaning. Root שוק concupiscere, Gesenius p. 990.

The verb which is found in lines 42, 43 of col. 1, *ittabul* 'it was taken off': *tatbul* 'thou takest off,' requires further

[1] Höllenfahrt der Ishtar, p. 45.

examination. I believe it is *tabul* 'to take possession of,' which is possibly another form of the verb *bil* to conquer, or become master of. I will give several examples of the verb *tabul* from other inscriptions.

The Prayer for the King, line 11 (see Transactions, vol. i, p. 109) wishes prosperity *ana tabbuli-su* to his Rule (or Government). The word is written [illegible].

In the inscription of Esarhaddon col. 2, 47 mention is made of a tyrant "who had *taken possession of* (*itbalu* [illegible]) the lands belonging to the inhabitants of Babylon and Borsippa."

And hence is derived [illegible] *muttabbilut* a Ruler, *ex. gr.* Tigl. i, 15, "The great gods who are the *Rulers* of Heaven and Earth."

In line 43, *Ammini tatbul*, why takest thou from me? Here, *ana ma* for what? why? is contracted into *anma*, *amma*. Thence *ammi-ni* why from me . . . . . ? see Schrader's observations on the word (p. 35).

The name of Hades, in this legend, is [illegible] which is generally admitted to mean "the Land of No Return." But I am not aware that any direct proof has been adduced of the truth of this translation. I was therefore glad to meet with the following gloss in 2 R 32 last column line 19.

[illegible] *irtsit la tarat* which means in Assyrian "the land of no return," and opposite to this was written the Accadian translation, which I cannot doubt, was [illegible] as in the legend of Istar: but unfortunately the word is fractured in the middle, and only the first and last letters remain in a perfect state, thus: [illegible]. The word *tarat* (return) differs very slightly from the *tairat* of the legend which is written [illegible] see page 119 of this volume, line 6.

In col. 1, line 54, [illegible] *Sibbu* 'a girdle,' is derived from the Heb. root סבב 'to encircle.' Gesenius says: circumdedit, cinxit. In proof of which I may refer to

2 R 34, 65 where *sibbu* stands next to *sababu.*

In col. 1, line 11, I have translated *Sakkul* "the gate-bars," and said that it was probably the same as the Chald. סכר the bar of a gate, *repagulum.* I have since found the word again in 4 R 16, 52 and also in line 54, where the Accadian word is rendered by the Assyrian *daltu* 'a door' (Heb. דלת); and the Accadian *sakkul* by the Assyrian *sikkuru* (Heb. סגור): and these were barred, as appears from the epithet *la padari* 'not openable.' *Sakkul* is therefore an Accadian word, but evidently related to *sikkur* in Assyrian (Heb. סגר clausit januam).

In col. 1, line 4, the god of the infernal regions is called *Irkalla.* This name is not otherwise known. Perhaps he was the same as *Urgal* or *Urugal*, a deity who in 2 R 30, 13 seems to be identified with Hades, or the land of *Aralli*, which is only another name for it.

Urugal . *Aralli*

In col. 1, line 54, Schrader is of opinion that is the name of a jewel. I have since found that it is the Accadian name for the Emerald; see 2 R 40, 59 . translated by the Assyrian *Airakhu*, which is the Chald. ירקן 'smaragdus viridis' (Schindler p. 811) derived from ירק viridis. Translate therefore: "there was taken off the emerald girdle of her waist."

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TRANSACTIONS

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VOL. III. DECEMBER, 1874. PART 2.

ON FRAGMENTS OF AN INSCRIPTION

GIVING PART OF THE

CHRONOLOGY FROM WHICH THE CANON OF BEROSUS WAS COPIED.

BY GEORGE SMITH.

Read 4th November, 1873.

BEROSUS the Chaldean historian, in the time of the successors of Alexander, translated the records of his country into the Greek language; and as the whole body of the literature of Assyria and Babylonia was inscribed on clay tablets, it was doubtless from such tablets that Berosus compiled his history.

Among the thousands of inscriptions which have been discovered, embracing every variety of subject, there has been hitherto a remarkable absence of any fragments of the general chronology of the country. In various inscriptions chronological notices have been found stating the number of years that had elapsed between particular reigns or events, and these extracts served to show the existence

of a regular scheme of chronology, making it appear more singular that such a chronological scheme had not hitherto been discovered.

Some years ago, among the clay tablets in the British Museum, I found a fragment of an Assyrian copy from a chronological work, but it was too small for publication, containing, in fact, only three or four words, so I copied it and put it away, in hope of finding at a future day a larger portion.

Since my return from Assyria I have discovered a much larger fragment and another small one; both of these join my former one, and enable me now to give to the world the first instalment of the long expected official chronology of Babylonia.

The fragments which I have found belong to a terra-cotta tablet, inscribed on both sides, and containing six columns of writing. Each column of writing I suppose to have had, when complete, from fifty to sixty lines of inscription. My fragments belong to the first, second, fourth, and fifth columns of the tablet, at about the middle of each column.

The colophon containing the date when this tablet was written is not preserved on the present fragments; but the copy probably belongs to the period of the seventh century B.C., when most of these Assyrian works were inscribed.

There is no evidence as to the date of the original document, and it is probable that the list after its first compilation was added to from time to time, so as to bring the record down to the periods of the successive writers.

In comparing the fragments of the new document with the scheme of Berosus it will be necessary to go over some of the particulars of his list, but this list has so often been given in full that I shall not repeat it now. Together with the new tablet I will notice some other inscriptions bearing on Babylonian chronology, so as to complete, as far as possible, the list of Babylonian kings.

The first dynasty of Berosus consists of ten kings, who reigned before the flood, and whose united reigns are given as 120 sari, that is 432,000 years. The first name in the list of Berosus is Alorus, and in my Early History of Babylonia I have identified him with a name found in the inscriptions

of Sargon, but I wrongly read "Ur," which is only part of the name, the whole I now read A-di-i-ur. Adi-ur (*meaning "devoted to the god Ur"*) is spoken of by Sargon as if he were the founder of the monarchy. The fifth monarch in the list of Berosus is named Amegalarus, and I would suggest that possibly this name represents the Cuneiform Amil-ur-gal (*meaning "Man of Urgal"*). A king of this name is mentioned on some Babylonian fragments in the Daily Telegraph Collection. The Cuneiform names of the last two kings of this dynasty are given in the Deluge tablets; they are Ubara-tu-tu, the Otiartes of Berosus and Ṣi-sit, his Xisuthrus. Ubara-tutu means servant of the god Tutu, and as the Assyrians used the word Ardu for a servant, the variant in one copy of Berosus, *Ardates*, for this word is not, as I first supposed, an error, but a Semitic form of the word. The reading Ṣisit for the name of the hero of the flood is only conjectural. I think it best, however, to retain it until we know the true form. The first character has also the value Ḫis. The name appears to be different in composition to most of the others, and may be compounded of "the sea" or "flood," and "life" or "escaped," meaning him who escaped the flood. The names of the kings before the flood are ordinary early combinations of two elements, such as are often met with in proper names, but the extravagant length of their reigns prevents our considering them historical.

The second dynasty of Berosus included 86 kings, whose united reigns are said to have amounted to 33,091 or 34,080 years.

The fragments of Cols. I and II of the new tablet probably belong to this period, but both in this and in other parts of the document the large groups of Berosus are broken up into smaller dynasties.

The fragment of the first column of the tablet which is preserved is very small, only containing the ends of three lines. One of these has the fragment of a mythical reign as follows: "years 600 (or more) he ruled," and the next line has the last word of a dynastic summation, "altogether."

This fragment shows the unhistorical nature of this part of the list, as we have here similar extravagant reigns to those in Berosus.

The fragment of the second column contains four names, which, from their position, I suppose also to belong to the second dynasty of Berosus. These four names are . . . . nini, Ilu-kassat, Mul-agu-nunna, and Abil-kisu. The last of these names is Semitic, and means son of Kisu. Kisu was a great town in Babylonia, now represented by the mounds of Hymer.

According to the general opinion of Assyrian scholars, the Valley of the Euphrates was at the period of the second dynasty of Berosus inhabited by Turanian races, and for that reason we should not expect to find Semitic names among their princes; but the presence of the name Abil-kusu may be accounted for by the practice of the later Babylonians, of occasionally translating Turanian names into their own language, having regard in this to the meaning and not the sound of the names. I have already quoted an earlier instance of this, the Semitic name Ardates, in Berosus, for Ubara-tutu.

There is nothing unhistorical in the character of the four names preserved in the second column, but all the lengths of the reigns are lost

After the fragment of the second column no more is preserved, until we come to the fourth column on the reverse of the tablet. This is the largest break in the document, and to this lost portion belong some of the most important reigns.

First among these is Iz-ḍu-bar, a monarch who appears to come somewhere about the division line which separates the age of romance from the historical period. While on the one side various extravagant stories are told of this monarch in the "Legends of Izdubar," on the other there are Assyrian copies of tablets, which appear to have been written during his reign. One of these has the following passage twice:—

9	. . . . .	Iz - ḍu	- bar	Ṣar	dan - nu	. . . . .		
9th	*omen*	*for*	*Izdubar*	*the*	*powerful*	*king*	. . . . .	

gab- ri la isu ṣar dannu ina
who a rival had not, the powerful king in

mati basi
the land is.

Izdubar had a son bearing in the inscriptions the Semitic name Za-ai-du, meaning "the hunter," but this may only be a translation of the original Turanian name. There is no evidence whether Zaidu succeeded his father.

Another prominent monarch belonging to this interval is Kudur-nanḫundi, an Elamite who conquered Babylonia in the twenty-third century B.C. I found at Kouyunjik a new text referring to this king, but am not able to throw any more light on his reign. There is an inscription referring to Kudur-nanhundi in Cuneif. Insc., Vol. III, p. 38, which may some day aid in the matter.

Nearly all the first thirty-three names in my Early History of Babylonia also belong to this period, but as I have no new facts respecting them I do not repeat their names here.

The fragment of Col. IV of the tablet exhibits traces of several lines probably belonging to the fifth dynasty of Berosus, which contained forty-nine kings and ruled 458 years.

The first reign on the fragment is connected with Babylon, but the name of the king is lost. The second name, which is incomplete, is Ṣumu, but this monarch is unknown. The third king is Zabu, the same as No. 6 in my Early History of Babylonia; he is known from the cylinder of Nabonidus as the founder of the temples of Sippara. The next name is mutilated, it is formed by the combination of Abil, meaning "a son," with the name of some deity now lost. A king named Abil-ṣin is No. 18 in my former list, perhaps he is this monarch. The next name, which is again mutilated, has only the first element, Ṣin, remaining. After this there is space for six names, all of which are lost, and

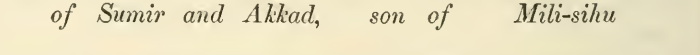
then we have fragments of two summations, ten (or more) reigns, and again ten (or more) reigns. Then commences a new dynasty, the name of the first king being lost. The name of the second commenced with the syllable Ki, and of the third one only the initial wedge of the name is left.

Here I have given all the fragments of names and lines, which are preserved, in the hope that they may lead hereafter to the identification of the monarchs.

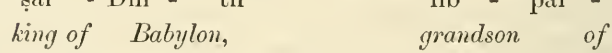
From here the record is entirely lost until we come to the fragment of Col. V, and to the interval between the fragments of Cols. IV and V most probably belong the names in my Early History of Babylonia, No. 34 to 56, but I have three names to add to this list: two are the son and grandson of Kuri-galzu (No. 50 in the list); these are from a monolith belonging to the Daily Telegraph Collection, and the third is from a broken obelisk referring to the reign of Tiglath-Pileser I, king of Assyria. The passage on the monolith reads—

Maruduk- pal - idina ṣar kissati ṣar
Merodach Baladan king of nations, king

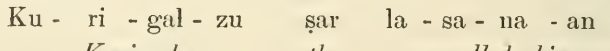
Ki - in - gi - ki ur abil Mi- li - si - ḥu
of Sumir and Akkad, son of Mili-sihu



ṣar - Din - tir lib - pal - pal
king of Babylon, grandson of



Ku - ri - gal - zu ṣar la - sa - na - an
Kuri-galzu the unequalled king.

The third monarch  Ka-ara-bur-ya-as, occurs on the broken Kouyunjik obelisk, referring to the reign of Tiglath-Pileser I, in the following passage :

"In the month . . . . in the eponymy of Assur-ram-nisi-su, the city of Bari . . . . from Murzi he captured, and in the same year in the month Sebat his chariots and warriors from the city of Assur he sent. The cities of Suindisula and Al . . . sande, cities in the neighbourhood of Dur-kuri-galzu, had revolted and to Kara-buriyas turned, the goods (?) of their country they captured."

The next and largest fragment of the new chronological tablet belongs to Col. V, and contains seven reigns and four dynastic summations, the translation of which is as follows:—

1. . . . . "The Kuabar of the land of the sea, altogether."

Here follows a straight line, which divides this summation from the dynasty which follows.

2. "The leader of the Kuabar of the land of the sea, Ṣimmas-siḫu son of Iriba-ṣin,
3. whose reign was prosperous, and his god in war made him triumphant, 17 years he ruled;
4. in the Ekal of Sargina buried.
5. Hea-mukin-zira the king who set himself up, son of Kutmar, 3 months he ruled;
6. In the field of Bit-kutmar buried.
7. Kassu-nadin-aḫu son of Sappai, 6 years he ruled; in the ekal.

Here a straight line drawn across closes the dynasty, and the summation follows.

8. These 3 kings were of the dynasty of the country of the sea, 23 years they ruled.

Another straight line follows, dividing the summation from the next dynasty, which proceeds—

9. Ulbar-surki-idina son of Bazi, 15 years he ruled; in the ekal of Kar-maruduk buried.
10. Nabu(?)-kudur-uzur son of Bazi, 2 years he ruled.
11. Amil(?)-suqamuna son of Bazi, 3 months he ruled; in the ekal of Lu . . . . buried.

Here a straight line again divides between the dynasty and its summation, which follows—

12. These 3 kings were of the dynasty of the house of Bazi, 20 years and 3 months they ruled.

Another straight line divides this from the next dynasty, but the royal name which headed the next line of writing, and which belonged to the only king of the dynasty, is lost by a fracture: what remains reads as follows—

13. .... (*name lost*) descendant of the race of Elam, 6 years he ruled;
14. in the ekal of Sargina buried.

Following this is the usual straight line and the summation.

15. This king was of the dynasty of Elam, 6 years he ruled.

After this comes the straight line before another dynasty, the record of which is entirely lost.

This is evidently an important fragment of Babylonian chronology, and the first point in connection with it is to decide to what period the list of names belongs. On this point there is the following evidence. About B.C. 1120 there ruled in Babylonia a king named Maruduk-nadin-ahi, and in some contracts dated in his reign one of the witnesses is "Ulbar-surki-idina son of Bazi, chief of the prefects." The same person is named as the fourth king in this fragment, from which I suppose that these monarchs followed Maruduk-nadin-ahi, and the summation at the commencement of the fragment will then refer to the dynasty to which he belonged. This identification will give for the seven kings the approximate date of from B.C. 1100 to 1050. This date is not without its difficulties; but I put it forward as a temporary place for these monarchs, until we know more of the chronology of the country.

Casting up the totals given in the fragment $23y + 20y\ 3m + 6y$, it would appear that the seven reigns only occupy a total of 49 years and 3 months, or on the average 7 years for a reign. From the position of this fragment in Baby-

lonian chronology, it must belong to the seventh dynasty of Berosus, which included 45 kings, who ruled 526 years, the average lengths of the reigns over the whole period being between 11 and 12 years.

The summation at the commencement of the fragment, and the notice of Sinmas-sihu both mention a race, the name of which is mutilated in both instances, and which I read with much doubt, Kuabar. No such name is known, and it does not appear to be Semitic. The tablet itself is written in a mixture of Turanian and Semitic words, but the meanings of most of them are so obvious that I need not stop to discuss them. The principal Turanian words are a-ab-ba, which equals the Semitic tamte, "the sea," kit, a Turanian particle meaning "of," nigin, equal to Semitic paḥar, "collected" or "together"; equal to Semitic damiqtu, "good"; equals tugultu "war" or "fighting"; verbal prefix equal maḥaẓ; equals raman kinu, "self raised"; equals e-pu-us, "he ruled"; sign of plural. There is only one phrase which needs particular notice. The expression occurs several times, *ina ekal*, followed by a proper name, and then the word *kibir*. Now, *ina ekal* generally means "in the palace," and if we could translate *kibir* "lived" or "ruled," we might suppose these passages to give the names of the palaces in which the kings ruled, but the meaning of *kibir* is "buried," and I therefore suppose *ekal* in this case to mean "tomb." I however only transcribe the word in my translation.

The first summation in this fragment and some subsequent passages, mention the land of the sea, meaning the district near the Persian Gulf. This country is mentioned in several other inscriptions, among others in a curious geographical list, where it occurs under the Semitic form "Tamte," this list of peoples gives tam-te (land of the sea), Ṣu-bar-tu; As-su-ru-u (Assyrians); E-la-mu-u (Elamites); Kas-su-u (Cosseans);

Ṣu-tu-u (Shuites); Qu-tu-u (Goim); Lu-ul-lu-bu Ak-ka-du-u (Babylonians).

The first king in Col. V bears the name Ṣimmas-sihu; he is said to have had a prosperous reign for seventeen years, and to have been buried in the tomb of Sargon. There is a contract tablet in the British Museum dated in his twelfth year.

His successor, according to the tablet, was Hea-mukin-ziru, a pretender, whose short reign of three months is not included in the dynastic summation. Of his successor, Kassu-nadin-aḥu, nothing is known beyond the fact that he reigned for six years. These three kings are considered by the writer of the tablet to constitute a dynasty, and, omitting the three months of Hea-mukin-ziri, his reign being probably contemporary with that of the third monarch, the duration of the dynasty is twenty-three years.

The next dynasty also consisted of three kings: these were brothers, sons of Bazi, and the sum of their reigns is said to have been twenty years and three months; but there must be some error in the lengths of the reigns, as the numbers, when cast up, only make seventeen years and three months.

There appears to be something wrong about the third reign, where, instead of three months, I would suggest three years and three months.

The first king of this dynasty is Ulbar-surki-idina, who appears a witness in the reign of Maruduk-nadin-aḥi. In one document there is a variant for this name . I believe that the Greek form, Laborosoarchodus, the name of a late Babylonian king, is a corruption of the Babylonian name Ulbar-surki-idina. The successor of Ulbar-surki-idina was his brother, whose incomplete name reads .....kudur-uzur; it should probably be completed Nabu-kudur-uzur. The name of the next monarch, another brother, is also mutilated, the last part reads .....suqamuna. I conjecturally restore it Amil-suqamuna.

After these kings the dominion passed to a man of Elamite descent, whose name is lost, all but a fragment of the last character, which was possibly "uzur."

One thing remarkable in this fragment is the small average in the lengths of the reigns. In this period it is only about seven years, and we have similar results in examining other portions of Babylonian history. The average of the reigns in the fourth dynasty of Berosus is about nine years; in the sixth dynasty between eleven and twelve years; and from Nabonassar to Nabonidus about ten years; while the average of the Assyrian reigns is nineteen years.

This fragment of Babylonian chronology is not perfect enough to affect the general questions of Babylonian history and antiquity, but I have some hopes of obtaining further portions of it, and by means of it solving some of those problems in early Biblical and Babylonian chronology which are now so difficult.

Fragment of Babylonian Chronology.

Column I.

1. ..... nir in - ak
..... [*years*].. 600 *ruled*

---

2. ..... an - nigin
..... *altogether*

---

3. .....
.....

COLUMN II.

4. ..... ni - ni .....
..... *nini* .....

5. Ilu - kas - sat abil * .....
Ilukassat son of the same .....

6. Mul - agu - nun - na .....
Mulagununna .....

7. A - bil - kisu abil .....
Abilkisu *son of* .....

COLUMN III (*Entirely lost*).

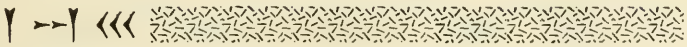
COLUMN IV.

8. Din - tir .....
Babylon .....

9. Ṣu - mu - [ru ?] .....
Sumu-[ru ?] .....

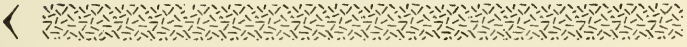
10. Za - bu - u .....
Zabu .....

11. A - bil - .....
Abil- .....

12. 
Ṣin .....
Sin ..... .

[*Lines* 13 *to* 18 *lost.*]

19.
10 .....
10 .....

20. 
10 ....
10 .....

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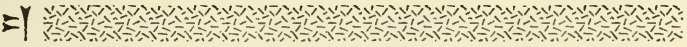
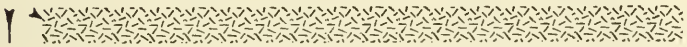
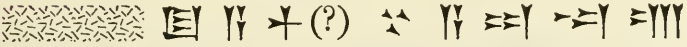
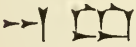
21. 
Iz .....
.....

22.
Ki .....
Ki .....

23. 
.....
.....

COLUMN V.

24. 
..... Ku - a - bar(?) mat A - ba - ba - kit
..... *Kuabar*(?) *of the land of the sea,*


an - nigin
altogether

---

25. ner - us Ku - a - bar (?) mat
The leader of the Kuabar(?) of the land

A - ab - ba - kit Ṣim - mas - si - ḥu abil
of the sea, Simmas-sihu son of

Iri - ba - ṣin
Iriba-sin,

26. sa palu damiqtu ilu su iz - ku - ta
whose reign was prosperous, and his god in war

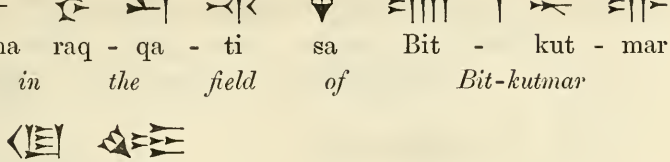
ba - an - pa - gi - in sanati 17
made him triumphant, 17 years

in - ak
he ruled;

27. ina e - kal Ṣar - gi - na ki - bir
in the ekal of Sargina buried.

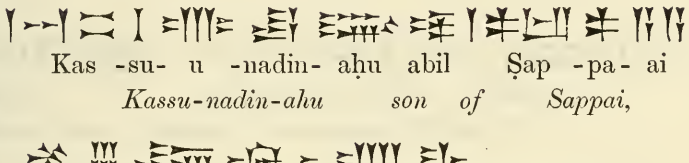
28. He - a - mu - kin - ziru ṣar im -
Hea-mukin-ziru the king who set himself

abil Kut - mar araḥi 3 in - ak
son of Kutmar, 3 months he ruled;

29. 

ina raq - qa - ti sa Bit - kut - mar
in the field of Bit-kutmar

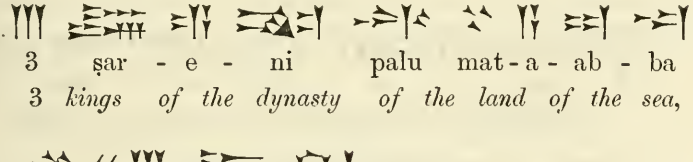
ki - bir
buried.

30. 

Kas -su- u -nadin- aḥu abil Ṣap -pa- ai
Kassu-nadin-ahu son of Sappai,

sanati 6 in - ak ina e - kal
6 years he ruled; in the ekal.

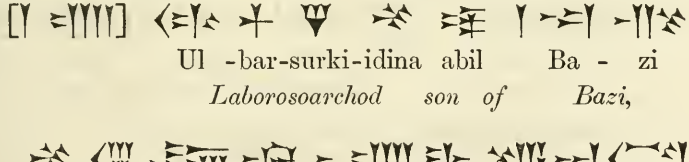
---

31. 

3 ṣar - e - ni palu mat - a - ab - ba
3 kings of the dynasty of the land of the sea,

sanati 23 in - ak - mis
23 years they ruled.

---

32. 

Ul -bar-surki-idina abil Ba - zi
Laborosoarchod son of Bazi,

sanati 15 in - ak ina e -kal Kar - maruduk
15 years he ruled; in the ekal of Kar-merodach

[ki - bir]
[buried].

33. [?] [Nabu?] - kudur - uṣur abil Ba - zi
Nebuchadnezzar son of Bazi.

sanati 2 [in] - ak
2 *years he ruled.*

34. [?] [Amil?] - su - qa - mu - na * 3 araḥi
[*Amil?*] - *suqamuna the same* 3 .. *and* .. *months*

in - ak ina e - kal Lu - .... lib
he ruled; in the ekal of Lu ... buried(?)

---

35. [ ] [3 ṣar - e] - ni palu bit Ba - zi
[3] *kings of the dynasty of the house of Bazi,*

sanati 20 arahi 3 [in] - ak - mis
20 *years and* 3 *months they ruled.*

---

36. ..... lib - pal - pal u - tu
..... *descendant of the race of*

Num - ma sanati 6 in - ak
Elam, 5 *years he ruled;*

37. ina e - kal Ṣar - gi - na ki - bir
in the ekal of Sargon buried.

---

38. [1 ṣar] palu [Num] - ma sanati 6
[1 *king*] *of the dynasty of Elam,* 6 *years*

in - ak
he ruled.

COLUMN VI *lost.*

NOTES.

IN consequence of the discussion, I have added the following explanatory notes :—

First, as to the name Adi-ur.—Dr. Oppert pointed out his own translation of the passage in question in "Les Fastes de Sargon," line 110, "inde a diebus remotis usque ad periodum . . . . ." I had not noticed this passage because Dr. Oppert had not translated the last word. Dr. Oppert has since the publication of the "Fastes" completed his translation, and reads, "From the days remote to the period of the moon"; taking *adi* (which I give as part of the proper name Adi-ur) as the preposition "to," answering to *ultu* "from." Dr. Oppert believes the "period of the moon" to indicate a cycle, which he supposes to have ended in the reign of Sargon. The passage in question occurs at two different dates in the annals of Sargon; from this reason, and because I do not see any evidence of the use of a lunar cycle for dating at this period, I do not think Dr. Oppert's explanation possible. Sir H. Rawlinson on this point called attention to the variant in the Cyprus monolith. From a cast of this inscription, supplied by Dr. Lepsius, I made out the passage, and published the translation in

the Zeitschrift für Ägyptische Sprache, Mai 1871. The two passages involved are :—

SARGON'S INSCRIPTION IN HALL AT KHORSABAD, LINE 110.

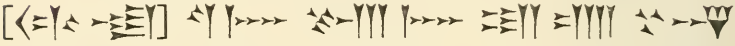
ul - tu immi ru - qu - ti

From the days remote of

A - di - i - ur

Adi-ur

MONOLITH OF SARGON FROM CYPRUS, COL. II, LINE 32.



[ul - tu] immi ruquti ẓi - bit Assuri

From the days remote of the foundation of Assyria.

Second, on the succession of the names.—Sir H. Rawlinson expressed a doubt if the list was a royal one, and stated in support of this that "there was only one instance among the names mentioned of the person being called king," and there was not a single instance showing that the son had succeeded the father. The summation after the reign of Kassu-nadin-ahi says distinctly, "these three kings," and gives their united reigns as twenty-three years. As regards the second objection, the mutilation of the list prevents our ascertaining the relationship of the monarchs mentioned in it, except in one place, where in a period of forty-nine years seven monarchs ruled, there being frequent revolutions, and apparently no opportunity for the succession of father and son. In the neighbouring country of Elam, by law brothers succeeded in preference to sons, and this may have been the rule in Babylonia.

Note on the word "Kibir."—In giving for this word the value "buried," I have been partly influenced by a passage

in Norris's Dictionary, p. 532, where he quotes Cuneif. Ins., Vol. II, p. 49, line 25, where we have *ki-du*, equal to *ki-bi-ru*. Mr. Norris gives the value "tomb," and quotes the Hebrew קבר "tomb," and כיד "destruction." In my Assurbanipal I have given *ki-bi-ri* "burial," see pp. 240 and 334. I afterwards found a fragment of syllabary, which gave . Here the monogram is equal to *kibir* and *makiddu*, forms of the two words already given. This monogram is also equivalent to *gibil*, *kilutu*, and *sarap*, the last two of which mean "fire" or "burning." These meanings, "destruction," "burning," and "burial," being all connected in this way, suggest the question whether some of the races in the Euphrates Valley did not burn their dead in the Assyrian period.

ON FOUR SONGS

CONTAINED IN AN

EGYPTIAN PAPYRUS IN THE BRITISH MUSEUM.

By C. W. Goodwin, M.A.

Read 7th April, 1874.

The Papyrus Harris 500 contains, upon the side which I have designated as the front, from its being rather less chafed and frayed than the other side, portions of eight pages of writing. The first page wants the beginnings of all the lines, but its purport is to some extent ascertainable. The last page has nothing but the initial words of the lines, and is practically useless. The remaining six pages are legible, with the exception of a few lines and words wanting here and there.

The text consists of four songs, of which three are of an amatory kind, bearing no inconsiderable resemblance to parts of Solomon's Song. The remaining one is a composition, intended to be sung to the harp; and its theme is the words which Herodotus tells us were pronounced at feasts when a mummied image was carried round and presented to each of the guests—"Look upon this! Then drink, and rejoice, for thou shalt be as this is." The song in our papyrus is said to be taken from the House of King Antuf, and must, therefore, be as early as the 11th Dynasty. It bears a great resemblance to the song of the harper in the tomb of Neferhotep, published by M. Dümichen, II Historical Inscriptions, Pl. XL, which has lately been translated in the Zeitschrift für Ægyptische Sprache, by Herr Ludwig Stern, from a copy

made by himself in the tomb.[1] A fragment of the identical song in our papyrus is found in the Leyden Monuments, IIIme Partie, Pl. XII, and has enabled me to supply a word or two illegible in our text.

The style of these pieces is evidently poetical, and many peculiarities of spelling and of language occur which are not found in the two plain prosaic pieces on the other side of the papyrus, of which I have in previous papers given an account. Without giving a complete transcription of the text, it would be hardly possible for me to comment advantageously on these peculiarities, and such remarks or explanations as I may be able to give must be reserved for separate notes on some other occasion. My object at present is to give something approaching to a translation of the four songs, in order to convey a general idea of their contents.

The first song is so fragmentary, that nothing but detached phrases can be given. The piece is divided into sections or paragraphs by an arm, or rather the leg and claws of a bird written in red ink, and in some cases the claw is surmounted by an eye. I cannot say whether there is any distinction between these marks of division. The song seems to be in the mouth of a woman addressing her lover, or perhaps soliloquizing about him. Beyond this I can give little explanation, and must leave the fragments which I have endeavoured to translate to speak for themselves.

THE FIRST SONG (*wanting the commencement*).

Papyrus Harris 500—*recto.*

Page 1.

LINE

1. . . . . I am with (thee). Give thy heart (to me) . . . .
2. . . . . amusement. Thou seekest to touch my leg, whilst I was
3. . . . . didst thou not come, seeking food? Wast thou not empty (?) of stomach? Wast thou not

[1] Herr Stern seems not to have been aware that this text had already been published by M. Dümichen. Hr. Stern's copy supplies a line which is wanting in M. Dümichen's.

LINE

4. . . . . of clothes, while I was rich in clothes? Didst thou not come to
5. . . . . thou tookest my breast; thou didst revel in its abundance, in the day of . . . .
6. . . . . millions . . . . *Section.* Thy love penetrated . . . .
7. . . . . on the water like *rerem* (?), abounding in gums of all kinds, with essences . . . .
8. . . . . runnest quickly to behold thy brother, like a mare spying . . . .
9. . . . . his axles (?); he exalts her love, like . . . .
10. . . . . like the wings of a hawk. *Section* . . . . grass for the mares
11. . . . . sister, one of the lilies, her breast of *rerem* (?), her arm
12. . . . . .

Page 2.

1. I am like a bird . . . . his nestling . . . . *Section.*
2. Do I not turn my heart to thy love, my wolf's cub? . . . . is thy bathing (?). I will not
3. leave him, for . . . . on the vigil of the inundation (?) for the land of Khara (Syria) with staves
4. and rods; for the land of Kash (Ethiopia) with masts (?); for the high-land with *khai* (wood of some kind) for the . . . .
5. with *tauisati* (wood of some kind). I will not listen to them to leave my love. *Section* . . . . boats . . . .
6. with . . . . of him who provides my path with flowers . . . . . .
7. lord of truth . . . . Let me in the night, the flood, what is it? . . . .
8. . . . of shrubs, ... his lilies, Nefer-Tum the . . . . . .
9. enlightening the earth with her beauties. Memphis, a vessel of *rerem* (?) set before Nefer-ha (the beautiful-faced. *Section.* I lie down in the chamber.
10. Yea! (I am) vexed with injuries; yea! my neighbours come to (console?) . . . . come amongst

LINE

11. them; they apply remedies with . . . . voice; yea! they know my pain. *Section.* The tower of . . . .
12. her pool is in the midst of her house; her doors open . . . my sister issues forth angry, (uttering) all sorts of exclamations at the
13. porter. She is irritated. Yea! listen to her voice, the youth is in dread of offending her. *Section.* I sail down

Page 3.

1. . . . . I came to . . . .
2. the Sun. My desire is to go to watch the
3. barges (?) upon . . . . the pool of waters.
4. I began to run; I spoke not, my
5. heart remembered . . . . Yea! behold
6. the coming of the . . . . . .
7. I stood with thee at the mouth of the pool of waters; thou
8. (didst turn) my desire to An (Heliopolis). Yea! turn back . . . .
9. . . . . of acacias, to the houses . . . .
10. I took the acacias of the houses . . . .
11. . . . . with my fan. I beheld
12. his doings. My face was towards the . . . . His bosom
13. was full of persea-fruit. I . . . . with

Page 4.

1. gums; . . . . the king . . . . *Section.*

Here ends the first song. The second commences on the first line of the fourth page, and extends to the first line of page 6. The text is now far more perfect; but there are several words which I do not understand.

Page 4.

1. The beginning of the song of joy and beauty of thy sister, beloved
2. of thy heart. Come to the meadows, my brother, beloved of my heart, (come) after me, thou who art beloved in all thy doings. (I) say to thee, see what (I) have done! I have come prepared,

LINE

3. my net (?) in my hand. in my hand is my *teb* (some instrument used in bird-catching?), and my cage of all birds of Arabia,
4. which alight in Egypt. One who annoints with precious oils comes with the choicest (spices), carrying my *uai* (?); he brings his odours
5. from Arabia. His claws are full of gums. My desire, thou knowest, is that we may unloose them together. I am with thee alone. Do thou listen to the voice
6. of the singing of my anointer with choice oils. Thou art near me, art with me. I bring the net (?)
7. thou fair one, thou who comest to the garden of one who loves him. *Section.* The voice of the bird resounds, occupied with his *uai* (?); thy love
8. draws me back; I know not how to unloose it; I prepare (?) my nets (?). Shall I call to my mother that she may come to me? Every day
9. I am laden with birds. The net is not ready to-day. I burn with thy love. *Section.* The bird flies
10. and perches. He feeds on the granaries. The many birds gyrate around . . . . . .
11. (thou) art my love alone; my heart is bound to thy heart; go not far (from me). *Section.* (I) go forth . . . .

Page 5.

1. . . . . my love. The desire rises within me that I may behold the food . . . . the salt, the strong liquors . . . .
2. that which is sweet in the mouth is like the gall of a bird. I smell, I snuff up. Solitary is he who . . . . my heart. I find him whom Amen hath given to me for
3. ever and ever. *Section.* Thou fair one! my heart . . . . when thou wast in thy chamber. Thy arm was laid upon my arm; thou didst survey
4. thy love. I (poured forth) my heart to thee, in the . . . . my . . . . in the night. I was as one in my
5. bower. Yea! art not thou the strength of (my) life, the joy . . . . . thou didst strengthen my heart, to seek

LINE

6. thee. *Section.* The voice of the swallow resounds. It saith the earth is enlightened. How do I wait for thee, thou bird, whilst thou chirpest (?)
7. I found my brother in his bed-chamber. My heart . . . . go not far from me. Let thy hand be in my hand. When I go to walk
8. let me be with thee, in every pleasant place. Give me the choicest of fair things, they . . . . not my heart. *Section.*
9. Ah! turn thy face towards the gate of going forth. Behold, my brother comes to me. My eyes look forth, my ears listen to the growling (?) of the dog (?)
10. Give me the love of my Nothu at once . . . . . my feet hasten
11. to go, to proclaim how he has deceived me. Yea I say thou hast found another woman; she . . . . looking in his face. Ah! his heart turns (?) to another, so that he despises me.
12. *Section.* My heart . . . . thou lovest me . . . . running to seek thee

Page 6.

1. I put aside my spinning . . . . . I finish my web . . . . . .
2. I end all my work.

This is the close of the song. From the number of new words, to the meaning of which I have been only directed more or less imperfectly by the context, the above translation must be taken as only a rough draft, susceptible of much amendment.

The third song is of a very different character, being (as before mentioned) one of those solemn and lugubrious compositions by which the Egyptians in the midst of their feasts were reminded of the shortness of human joys. Probably there were numerous varieties of this class of song.

The Theban tombs, if well explored, would most likely furnish us with other examples besides those given in M. Dümichen's work, Historische Inschriften, Vol. II, Pl. XL and XL*a*.

Page 6.

2. The Song of the house of King Antuf, deceased, which is (written) in front of
3. the player on the harp. All hail to the good prince, the worthy good (man). The body is fated (?) to pass away, the atoms (? or perhaps the little ones, the children?)
4. remain, ever since the time of the ancestors. The gods who were before time rest in their tombs; the mummies
5. of the saints likewise are enwrapped in their tombs. They who built houses, and they who have no houses, see!
6. what becomes of them. I have heard the words of Imhotep and Hartataf. It is said in their sayings,
7. "After all, what is prosperity? Their fenced walls are dilapidated. Their houses are as that which has never existed.
8. No man comes from thence, who tells of their sayings, who tells of their affairs, who encourages (?) our hearts. Ye go
9. to the place whence they return not. Strengthen thy heart to forget how thou has enjoyed thyself. Fulfil thy desire whilst thou livest.
10. Put oils upon thy head, clothe thyself with fine linen adorned with precious metals
11. with the gifts (?) of God. Multiply thy good things; yield to thy desire, fulfil thy desire with thy good things
12. (whilst thou art) upon earth, according to the dictation of thy heart. The day will come to thee, when one hears not the voice, when the one who is at rest hears not

Page 7.

1. their voices (*i.e.* of the mourners). Lamentations deliver not him who is in the tomb . . . .
2. Feast in tranquillity, seeing that there is no one who carries away his goods with him. Yea, behold, none who goes (thither) comes back again."

The allusion to the sayings of Imhotep and Hartataf is very interesting. Imhotep, the son of the primæval god Ptâh, was the mythical author of various arts and sciences. In an inscription copied by M. Dümichen (Tempel Inschriften, I, Pl. 97), a certain part of the Temple of Edfou is said to have been restored, "as it is in the book of the model of a temple, composed by the chief, Kher-heb Prince Imhotep, eldest son of Ptah." The Greeks spelt the name *Ἰμούθης*, but more often substituted the name *Ἀσκλήπιος* or Æsculapius. One of the Hermetic books entitled *Κόρη κόσμου* (quoted in Fabricius Bibl. Græca, p. 52), puts the following words in the mouth of Isis, who addresses her son Horus: "*Ψυχῶν μέν Ὄσιρις ὁ πατήρ σου, σωμάτων δὲ ἑκαστου ἔθνους ἡγεμών. Βουλῆς δὲ ὁ πατὴρ παντων καὶ καθηγητὴς ὁ Τρισμέγιστος Ἑρμῆς. Ἰατρικῆς δὲ ὁ Ασκλήπιος ὁ Ἡφαίστου. Ἰσχύος δὲ καὶ ῥώμης πάλιν Ὄσιρις-Μεθ' ὧν ὦ τέκνον αὐτος σύ. φιλοσοφίας δὲ Ἀρνεβασκῆνις, ποιητικῆς δὲ πάλιν ὁ Ασκλήπιος ὁ Ἰμούθης.*

From this it appears that not only architecture, but the healing art and poetry were amongst the inventions of Imouthes. The name Arnebaskenis, which occurs in this passage, requires elucidation. It appears to me to refer to the elder Horus, Aroeris . . . . . *Har-neb* . . . . Horus, lord of some attribute or place, the Egyptian word for which I am unable to suggest.

The name Hartataf in our papyrus is that of the son of King Menkara, to whom the discovery of the 64th Chapter of the Ritual is attributed, and whose name is also mentioned in Papyrus I Anastasi, as the author of some mystical work.

The fourth song is of the amatory kind. Only ten lines of it remain, of which the following partial translation will give some idea.

Page 7.

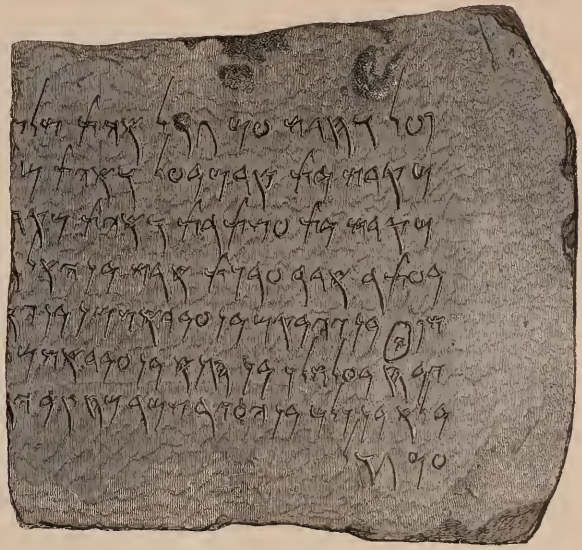
3. The beginning of the song of joys—of the fragrant flowers. Thou enchainest my heart, thou hast caused me to be as one who

4. seeks, that I may be in thy bosom. My prayer (is) to hear the . . . . . of his heart. That I may behold the brightness
5. of (his) eyes. I fawn upon thee, to behold thy love, O! man of my heart! Most delightful is my hour
6. of going forth; an hour of eternity, when I lie down with thee, and thou . . . . my heart . . . . . *Section.* . . . I am thy eldest sister. I am unto thee like the garden which I have planted with flowers
8. with all sorts of sweet herbs and sweet odours. It is watered by thy hand
9. refreshed by the breezes, a pleasant place to walk in. Thy hand is in my hand, I remember, and my heart is joyful at our walking,
10. drinking together, how I listened to thy voice. It was life to me to hear it. All the sights which I beheld they were
11. better than eating and drinking. *Section.* . . . . . I bring thy garlands, when thou comest
12. drinking. Thou liest down on thy couch. I behold thy feet . . . .

In the commencing and concluding words of each of the sections of this song, there is a species of alliteration which appears not to be unintentional.

In concluding this account of the Harris Papyrus 500, based upon a somewhat rapid inspection, I would express a hope that the text may be soon published, and made accessible to Egyptologists. Mature consideration would doubtless develop many points of interest which have escaped me.

The Phœnician Inscription commonly called
MELITENSIS QUINTA.



ON THE PHŒNICIAN INSCRIPTION GENERALLY KNOWN AS THE "MELITENSIS QUINTA."

By Professor William Wright, LL.D.

Read 7th June, 1874.

This inscription was first published by Michelangelo Lanci,[1] and soon afterwards re-edited by the Duc de Luynes.[2] The treatise of the Italian scholar I have not myself seen, but Blau has given some extracts from it in the Zeitschrift der Deutschen Morgenländischen Gesellschaft, vol. xviii, p. 634, whence it appears that Lanci received first a copy and afterwards an impression of the stone from the Abbate Luigi Marchetti, who then resided at Malta. As to the place where it was discovered, or the name of its possessor at that time, Lanci seems not to say a single word.

The genuineness of the inscription was doubted by E. Quatremère,[3] and Ewald[4] seems also to have cherished some slight suspicions regarding it; but Blau maintains its genuineness,[5] even though the Prussian Consul at Malta in 1863, H. G. C. Ferro, did not hesitate to declare it "an indubitable forgery," on the authority of the Librarian and Director of the Museum and Collection of Antiquities, D. C. Vassallo, a friend of Marchetti, who said that no such

[1] Ragionamenti di M. Lanci intorno a nuova stela fenicia discoperta in Malta. Roma, 1855, 8vo. 30 pp., with plate.

[2] Mémoire sur le Sarcophage et l'inscription funéraire d'Esmunazar, roi de Sidon, par H. d'Albert de Luynes. Paris, 1856. Appendice, Inscription punique de Malte, p. 63.

[3] In his review of the Duc de Luynes' Mémoire, Journal des Savants for 1856, p. 300 sqq.; in particular pp. 312–315.

[4] Erklärung der grossen phönikischen Inschrift von Sidon, etc. (aus dem siebenten Bande der Abhandlungen der königl. Gesellschaft der Wissenschaften zu Göttingen), 1856; in particular pp. 66–68.

[5] Zeitschrift der D. M. G., vol. xiv, pp. 650–653.

stone was ever heard of at Malta.[1] Schröder speaks of it in his work on the Phœnician language,[2] at pp. 51 and 234, and says that "the original is unknown."

This is happily no longer the case. All doubt as to the genuineness of the inscription vanishes in the face of the slab itself,[3] which is at this moment in the hands of Dr. Birch, the Keeper of the Antiquities in the British Museum, having been deposited with him by its present owner, Mrs. Strickland, of Malta, who also possesses the inscription known as "Melitensis tertia," and various other Maltese antiquities.

The slab is of white marble, about $6\frac{1}{8}$ inches in length by $5\frac{5}{8}$ inches in extreme breadth, and $1\frac{1}{2}$ in thickness. The inscription, which touches the left-hand side of the stone, occupies a space of about $4\frac{5}{8}$ inches by $3\frac{5}{8}$. The margin on the other three sides varies from three-quarters of an inch to an inch and a half in breadth, according to the state of the stone.

For the satisfaction of students, I here reproduce the transliterations and renderings of the Duc de Luynes, Quatremère, Ewald, and Blau.

The first named scholar prefaces his translation (Mémoire, p. 66) by remarking "que toute la partie gauche de cette belle inscription a disparu, de sorte que toutes les phrases commencées ne sont pas continuées au delà des deux tiers environ de la pierre sur laquelle elles étaient gravées." The following is his decipherment.

1. פעל וחדש עם גול אית שלש [.....ואית]
2. מקדש[י] ב[י]ת צדמבעל ואית מ[קדשי בית.....ואית]
3. מקדש[י] ב[י]ת עשתרת ואית מקד[שי .....]
4. בעתר אדר ערנת ארש בן־י[ו]אל .....
5. שפט בן־זיבקם בן־עבדאשמן בן־י[ו]אל .....
6. זבח בעלשלך בן־חנא בן־עבדאשמ[ן .....]
7. בלא בן־זלם בן־יעזר שמר מחצב י[ו]א[ל .....]
8. עם גול:

[1] Zeitschrift d. D. M. G., vol. xviii, pp. 633–636.

[2] Die Phönizische Sprache, Halle, 1869.

[3] Already carefully described, from actual inspection, by Von Maltzan in the Zeitschrift d. D. M. G., vol. xxiv, p. 232, who did not, however furnish a copy of the photograph in his possession.

"Fecit et renovavit cum exsultatione tres (. . . . . .
. . . . et)
sacraria templi Sadam-Baal et sacraria (. . . . . et)
sacraria templi Astartæ et sacraria . . . . . .
in largitione extensa ærarii Ores, filii Joël . . . . . .
(N.) suffes, filius Ziubecom, filii Ebed Esmun, filii
Joël . . . . . .
sacrificavit Baalsillec, filius Hannæ, filii Ebed Esmun (filii
. . . . filii . . . .) . . . .
Belæ, filii Zalam, filii Jaëzer; attendit ad opus à lapicidis
Joël (et fecerunt et consecraverunt)
cum exsultatione."

Quatremère seems to have been actuated in his criticisms by little else than a desire to find fault with or mortify the Duc de Luynes. The first reason which he alleges for doubting the genuineness of the inscription is "le soin avec lequel on a séparé les mots qui composent l'inscription." And yet in Citiensis 2da (Schröder, pp. 228, 229) the words are usually separated (as on the Moabite Stone) by a single point. For us this argument of Quatremère has no weight whatever, because in Carthag. 90 Brit. Mus. (Schröder, pp. 247, 248), of which Euting's Carthag. 196[1] is a part, the words are divided in the same way as in Melit. Quinta; as also in some other smaller inscriptions. Quatremère next remarks that ordinarily "quand un mot placé à la fin de la ligne ne peut y tenir en entier, une partie est renvoyée à la ligne suivante"; but that in this inscription "chaque ligne offre un nombre de mots bien alignés, dont aucun n'enjambe sur la ligne suivante." The simple answer is, that not a single line is really complete. Thirdly, says Quatremère, "à la fin de la seconde ligne, on trouve un ם isolé. Comme la ligne suivante commence par le mot מקדש, on pourrait être tenté de croire que le fabricateur de l'inscription a voulu imiter un usage observé dans les manuscrits syriaques et rabbiniques." There is, however, a trace of a letter after the ם (see below)); and even if there were not, the damaged state of the inscription disposes at once of this argument. Next, "la particule אית,

[1] See Euting, Punische Steine, Mémoires de l'Académie Impériale des Sciences de St.-Pétersbourg, vii série, t. xvii, no. 3, 1871.

qui indique le régime du verbe actif, ne s'est rencontrée, jusqu' aujourd'hui, que dans l'inscription de Sidon," which therefore served as a model to the forger! Supposing that אית were still found in Sidon. I alone,[1] I fail to see the force of the argument. Further, "les noms de divinités et d'hommes que présente l'inscription ont une physionomie étrange, qui n'offre point la caractère de noms phéniciens." This arbitrary remark Quatremère applies not only to the really difficult צדמבעל, but even to such words as ארש, זלם (a wrong reading), זיבקם, and הנא. Of יעזר he cannot deny the Phœnician aspect, but in the Bible "il se trouve employé comme un nom de ville et non pas comme un nom d'homme"; as if the occurrence of the local name יַעְזֵר in the Old Testament could decide such a question. So far does Quatremère go in this respect, that he actually pretends to believe that the name of בלא in line 7 was suggested to the forger by that of "Abela, auquel nous devons une description de l'île de Malte," or by that of "Vella," a literary impostor of the last century! Finally, according to Quatremère, the forger of this inscription was so ignorant of Hebrew and Chaldee that he wrote, in the fourth line, בעתר אדר instead of בְּאֲתַר אִדַּר, "in the place of the threshing-floor," the following name ערנת (another wrong reading) being suggested to him by the Biblical name אָרְנָן! After all, however, Quatremère gives his own reading and interpretation as follows (loc. cit., p. 315):—

1. פעל וחדש עם גול שלש
2. מקדש בת צרמבעל ואית מ
3. מקדש בת עשתרת ומקדש
4. בעתר אדר ערנת ארש בן יאל
5. שפט בן זיבקם בן עבדאשמן בן י
6. זבח בעלמלך בן הנא בן עבדאשמן
7. בלא בן זלם בן יעזר שמר מחצבי
8. עם גול

[1] It is found in several other inscriptions (see Levy's Phönizisches Wörterbuch, 1864, art. אית), notably in Carthag. 195, line 1 (Euting, Punische Steine, Taf. xii).

"Fecit et renovavit populus Goli tria
Sacraria: Templum Saram Baal, et
Sacrarium Templi Astartes, et Sacrarium
In loco areæ Adnat-Ares (*sic*), filii Ioël
Suffetis, filii Zibkam, filii Ebed-Aschmun, filii Ioël:
Sacrificavit Baal-Malak, filius Hanna, filii Ebed-Aschmun, (filii)
Bala, filii Zalam, filii Iazer, custodis lapicidinarum
Populi Goli."

Ewald seems, as we have said, to have had some slight doubts as to the genuineness of the stone. At least he says (loc. cit., p. 66), "Wo und von wem der Stein welcher sie enthält in Malta gefunden sei, oder wo er jetzt aufbewahrt werde, ersehen wir hier nicht: es sind aber in den neuesten Zeiten wiederum soviele erdichtete Alterthümer betrüglich in Umlauf gesetzt dass wir auch deswegen desto strenger nach solchen Dingen fragen müssen." He assumes that very few letters are wanting,—two in the third line, and three in the sixth. The great inequality in the length of the lines does not seem to have struck him as at all remarkable; and as for the ם at the end of the second line, he believes it was put there by the stone-cutter merely to fill up a space which was not large enough to contain the word מקדש. His reading and version are:—

1. פעל וחדש עם גול אית שלש
2. מקדש בת צרמבעל ואית מ
3. מקדש בת עשתרת ואית מקד[שז]
4. בעתר אדר ערכת ארש בן האל
5. שפט בן זיבקם בן עבדאשמן בן י
6. זבח בעלמלך בן חנא בן עבדאשמ[ן בן]
7. בלא בן זלם בן יעזר שמר מחצבי
8. עם גול

"Es liess neumachen das Volk von Gaulos das dreifache heilige Bild des Hauses Ssûrmu-baal's und das h. Bild des Hauses der Astarte und dieses h. Bild, durch Hülfe des ehrenwerthen Arash Sohnes Haêl-schufet's Sohnes Zaibeqam's Sohnes 'Abdeshmun's Sohnes Jizbach-baalmilik's Sohnes

Channa's Sohnes 'Abdeshmun's Sohnes Balla's Sohnes Zilim's Sohnes Ia'zer's, des Aufsehers der Steinhauer des Gaulos-Volkes."

Blau successfully defends the genuineness of the inscription against the arguments of Quatremère and the doubts of Ewald. He agrees with the latter scholar, against the Duc de Luynes, in believing the stone to be only slightly injured, and interprets it as follows.

1. פעל וחדש עם גול אית שלש[ת]
2. מקדש בת צדמבעל ואית מ[חצת]
3. מקדש בת עשתרת ואית מקד[ש]
4. בעתר אדר ערכת ארש בן יאל [ה]
5. שפט בן זיבקם בן עבדאשמן בן י[אל]
6. זבח בעלשלך בן חנא בן עבדאשמ[ן בן]
7. כלא בן זלם בן יעזר שמרם חצבי
8. עם גול

"Es liess neubauen die Gemeinde von Gaulos den dritten Theil des Heiligthums im Tempel der Sadambaal, und die Hälfte des Heiligthums im Tempel der Astarte, und das Heiligthum im Tempel der Hathor.—Es verwaltete die Tempelsteuern Aris, S. Iuël des Richters, S. Zêbqam, S. Abdaschmun, S. Iuël.—Die Opfer brachte Baalschillekh, S. Hanna, S. Abdaschmun, S. Balla, S. Zallam, S. Jaazor.—Die Aufsicht führten die Steinmetzen der Gemeinde von Gaulos."

Subsequently Blau emended his reading of line 7 into שמרם חצב יר, "die Zimmerleute der Gemeinde von Gaulos."

My own opinion is that the Duc de Luynes is right in assuming the loss of a considerable portion of the stone. The slab has not been violently broken or smashed, like the tablet of Marseilles and Carthag. 90 Brit. Mus., but apparently, as Von Maltzan has already remarked, deliberately cut or sawed through; and I think we may safely say, judging from the dimensions of the stone, that fully one half is gone. An important commemorative inscription, doubtless placed in a conspicuous position on a public building, would never have been engraved on a diminutive tablet of say 8 inches

in length by 6 in breadth.[1] To me it appears that the inscription was set up in commemoration of the execution of a certain work at the public expense; and that the latter part of it, like the inscription of Tucca in the Brit. Mus., mentioned the names of the persons connected with and engaged in the work, down to the masons and carpenters. I read and translate as follows.

1. פעל וחדש עם גול אית שלש .....
2. מקדש בת צדמבעל ואית מ .....
3. מקדש בת עשתרת ואית מקד .....
4. בעתר אדר ערכת ארש בן יאל [ה] .....
5. שפט בן זיבקם בן עבדאשמן בן יא .....
6. זבח בעלשלך בן חנא בן עבדאשמ .....
7. בלא בן כלם בן יעזר שמר מחצב י[ר] .....
8. עם גול

1. "The people (municipality) of Gozo made and renewed (*i.e.* rebuilt *or* repaired) the three . . . . . .
2. sanctuary of the temple of Ṣadam-Baʿal, and the s(anctuary) . . . . . .
3. sanctuary of the temple of ʿAshtôreth, and the sanctu-(ary) . . . . . .
4. with the money (?) of the most worthy (?) 'Ârîs, the son of Yû'êl, (the) . . . . . .
5. Shâfât, the son of Zybḳm, the son of ʿAbd-'Eshmûn, the son of Yû'ê(l) . . . . . .
6. sacrifice, (*or* sacrificed) Baʿal-shillêkh, the son of Ḥannô, the son of ʿAbd-'Eshmû(n) . . . . . .
7. Ballô, the son of Klm, the son of Yaʿazôr, the superintendent of the carpenters . . . . . .
8. the people (municipality) of Gozo."

I append a few remarks by way of commentary.

Line 1. פעל וחדש may either be singular, פָּעַל וְחִדֵּשׁ, or plural with scriptio defectiva, פְּעֲלוּ וְחִדְּשׁוּ.[2] The word

[1] Compare, for instance, the shape of Sard. triling. 1, Cit. 2, Carth. 195 Massil., Tucc., and several others, in all of which the length of the stone greatly exceeds its breadth.

[2] See Carthag. 195, line 1 (Euting, Punische Steine, Taf. xii).

עָם admits of either construction.—גול, more probably גַּוָּל (Movers, Das Phönizische Alterthum, 3ter Theil, p. 159) or גָּוֶל than גּוֹל (Blau, Z. d. D. M. G., vol. xiv, p. 650) is the name of a small island close to Malta, in Greek *Γαῦλος* or *Γαῦδος*, and *Καῦδος*, in Arabic غَوْدَش *Ghaudesh*, which latter forms with *d* are the parents of the modern name of Gozo.[1]—עַם גול, "the municipality of Gozo," as on coins עם מחנת, "the municipality of Panormus (Palermo)."—אית is the Phœnician equivalent of the Hebrew אוֹת or אֶת־, prefixed to the accusative; pronunciation uncertain (see Schlottmann, Die Inschrift Eschmunazars, p. 97); Plautus (Pœnulus) heard *yth*.

Line 2. On צדמבעל (the stone has distinctly ד, not ר), *Σαλαμβάς*, *Σαλαμβώ*, *Salambo*, see Blau, loc. cit., p. 651. The interchange of *l* and *d*, however, causes a difficulty, and is perhaps scarcely justified by the analogy of *Γαῦλος* and *Γαῦδος*.—At the end of this line Blau discovers, in Lanci's copy at least, part of one limb of a ח (which has induced him to read in the first line שְׁלִשִׁת, and in the second מַחֲצִת); but I cannot see anything of the kind on the stone. All that I can there descry is a very small apex ו, apparently the extreme right-hand point of a ק, the second letter of מִקְדַּשׁ.

Line 4. This is the most difficult portion of the inscription. If Blau's rendering were correct, בעתר could hardly be anything but a *mistake* of the carver for בת עתר, "the temple of Hathor," which seems unlikely in so carefully executed an inscription. It may be that עתר is here = Heb. עֹשֶׁר, "wealth." Some rich citizen may have given a large sum to be expended in repairing and adorning the temples, under the direction of the governing body of the island.—It seems natural to take אדר ערכת, with Ewald, in the sense of "hochwürdig," אדר being the well-known equivalent of the Heb. אַדִּיר, and ערכת = עֵרֶךְ. My difficulty lies in a doubt as to whether עֵרֶךְ admits of the meaning which

[1] See also Movers, 2ter Theil, p. 359; Gesenius, Monumm. Phœn. p. 301.

we attach to personal "worth." Perhaps ערכת may come nearer in signification to מַעֲרָכָה and מַעֲרֶכֶת, or to the Chaldee and Rabbinical עַרְכָּאָה, "magistracy," "court of justice." The latter word, it may be objected, comes from the Greek ἀρχή; but of that I am not so sure. Admitting either of these conjectures, אדר ערכת might mean "the chief edile," "the superintendent of public works," or "the chief magistrate" of the little island. In Carthag. 195 (Euting, Punische Steine, Taf. xii), mention is made of "decemviri" in charge of the temples, עשׂרת האשם אשׁ על המקדשׁם. In that case, the enumeration of the officials connected with the undertaking, which the inscription of Gozo commemorates, would commence with these words; and we would have to connect בעתר (meaning uncertain) with the preceding portion of it.—*'Ârîs* and *Yû'êl* are only guesses at the Phœnician sounds. For אָרִשׁ, or possibly אָרֵשׁ,—a name of frequent occurrence,—we have, perhaps, classical authority (see Gesenius, Monumm. Phœn., p. 401, *Aris*); *Yû'êl* = יוֹאֵל, following the analogy of *sûfêt* (sufes, sufetis), *i.e. shûfêṭ*, שׁוֹפֵט = שפט, "judge."—At the end of this line a thick stroke is visible, which might be the right-hand limb of any of the three letters ה, ח, or ר, most probably the first (the article).

Line 5 commences with a word which may be the above mentioned *shûfêṭ*, "judge," in which case the article ה, if expressed at all (see Carthag. 195, line 1, Euting, Punische Steine, Taf. xii, and Sard. triling. 1, line 2), must have stood at the end of the previous line. More probably, however, it is a name = Heb. שָׁפָט, which occurs, for instance, in Tucc., line 7, and several other inscriptions.—The pronunciation of the name זיבקם (see Carthag. 218, line 4, Euting, Punische Steine, Taf. xxiv) is uncertain; but it seems unlikely that the י should be merely a *mater lectionis*.

Line 6. It is impossible, in the present state of the stone, to say for certain whether זבח is a verb in the perfect, or, which seems more likely, the noun זֶבַח, "offering," "sacrifice." The name בעלשלך is common, and its pronunciation certain from Lept. triling. 1, where the Latin text

has *Balsilechis*, and the Greek *βαλσιλλήχ*. The name of חנא is too well known to need explanation, Lat. *Hanno, Anno;* Gr. *Ἄννων*.—Of the final ן of אשמן the apex is just visible at the edge of the stone.

Line 7. The true sound of the name בלא is uncertain. It seems to occur also in an inscription from Ghelma; see Levy, Phöniz. Studien, 2tes Heft, p. 106.—The interpreters of the inscription, doubtless misled by Lanci's copy, have all read the next name as זלם; but the stone has distinctly כ, and not ז. The pronunciation is doubtful (*Kallâm*?).—יעזר is probably to be pronounced יַעְזֹר.—On the stone שמר is distinctly separated from מחצב, which obliges us to regard it as a singular = Heb. שֹׁמֵר.—At the end of the line the thick stroke of a letter is discernible, which can be nothing but ה, ח, or, in this case most probably, ר, viz. מחצב יר. The word יר means in Phœn. "wood," "timber," = Heb. יַעַר, as in Tucc., line 6, החרשם שיר, *i.e.* הַחֹרְשִׁם שֵׁיר, "the carvers of wood," "the carpenters" (see Gesenius, Monumm. Phœn., p. 390, art. *Iar*). Consequently מחצב is a derivative from חָצַב, "to cut"; probably מְחַצְּבֵ, particip. plur. Pi"el with scriptio defectiva (compare the Pu"al in Isaiah li. 1).

As to the antiquity of this inscription, it must be considerable. The character belongs to the best period of the Punic or Carthaginian type, and we shall not be far wrong if we assign it to the same age as the inscription of Marseilles and Carthag. 90 Brit. Mus. = Schröder's Karth. 1, that is to say, about the middle of the third century B.C. See Lenormant, Essai sur la Propagation de l'Alphabet Phénicien, t. 1, pp. 154, 155, and Blau in the Z. d. D. M. G., vol. xxiv, p. 653.

Blau and Ewald are agreed that the inscription relates to works executed by the people of Gozo *in the island of Malta*. The latter scholar says (loc. cit., p. 67): "Es lässt sich denken das dessen (des Eilands Gaulos) Bewohner Antheil an den Heiligthümern in Melite suchten und so drei kleinere Heiligthümer, zunächst wohl nur h. Bilder, in drei Tempeln errichteten; das eine von diesen stand dann über dem Steine unsrer Inschrift." Blau says with greater precision (loc. cit., p. 649): "Ewald fühlte schon richtig, dass es sich dabei

um einen *Antheil* der Gauliter an den Heiligthümern der phönikischen Colonisten auf Malta handelt: in einfacher Verfolgung dieses Gedankens giebt sich die richtige Deutung der Worte und die Ergänzung der Lücken am Ende einiger Zeilen gleichsam von selbst. Bei dem Neubau der drei Heiligthümer, die darin erwähnt werden, waren nämlich die Gauliter bei dem einen für ein *Drittheil,* für die *Hälfte* bei dem zweiten betheiligt, und hatten das dritte *ganz* aus eignen Mitteln renovirt."

There being no evidence in favour of Ewald's and Blau's readings, but much against them, this whole fabric falls to the ground. The inscription, even in its imperfect state, seems to mention not three but *four* shrines, viz., line 2, בת צדמבעל מקדש, and a second, of which the name is lost, —ואית מ; line 3, מקדש בת עשתרת, and a fourth, of which the name is likewise gone,—ואית מקד. But I really find no proof of the stone having been actually *discovered* in Malta. Why may it not have been brought thither from Gozo? In that little island there was a famous temple of Calypso-Aphrodite, mentioned by the compiler of the Etymologicum Magnum (ed. Gaisford, col. 1549, note on p. 543, 49), ἐν δὲ Καύδῳ καὶ Καλυψοῦς ἐστὶν Ἀφροδίτης ἱερόν; and the researches of the Count Della Marmora and other travellers have made us acquainted with a large *double* temple, each portion of which comprises *two* courts. See Gerhard, "Ueber die Kunst der Phönicier," in the "Philologische und historische Abhandlungen der königl. Akademie der Wissenschaften zu Berlin," 1846, p. 579 sqq.; in particular pp. 600–602, and Taf. II. Is it not probable that the inscription, of which we have treated, is connected with extensive repairs of this building, which was doubtless one of the principal temples in Gozo?

CALENDAR OF ASTRONOMICAL OBSERVATIONS

FOUND IN

ROYAL TOMBS OF THE XXTH DYNASTY.

By P. Le Page Renouf.

Read 2nd June, 1874.

The Astronomical Calendar of which a translation is here given was discovered in 1829 by Champollion in two of the royal tombs at Biban-el-moluk, near Thebes, and was supposed by him to present a table of the constellations and their influences for all the hours of each month in the year. The copy of the text, which is given in the plates of Champollion's *Monumens*, is unfortunately a mere chaos, made up out of *two* texts, identical indeed in many parts, but different and even contradictory in others. Champollion had carefully noted the discrepancies, which have been wholly disregarded by his editor. The only trustworthy copies of the two texts are those contained in the *Denkmaeler* of Dr. Lepsius (Abth. III, Bl. 227, 228 and 228 bis.).

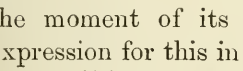
The most elaborate comment on this Calendar is to be found in a dissertation of the late eminent French astronomer, M. Biot, in the twenty-fourth volume of the *Mémoires de l'Académie des Sciences.* A French translation of the Calendar, by M. Emmanuel de Rougé, is appended to M. Biot's dissertation. The fundamental hypothesis of this dissertation is that the Calendar is a record, for astrological purposes, of the *risings* of stars and constellations. This hypothesis is entirely without foundation in the Egyptian text, which contains no allusion whatever either to astrology or to risings of stars.

M. Biot's mistake was suggested by the old version of Champollion, "la constellation d'Orion (*influe*) sur le bras gauche." Had not the unfortunate word *influe* been interpolated by the translator, M. Biot could hardly have missed the sense of "Orion sur le bras gauche," or "au milieu." The document simply records the star's *position in the sky.*

The Calendar, which is unfortunately imperfect in many parts, consisted of twenty-four columns, two being assigned to each month, or one to every fifteen days. Each column contains thirteen entries, one for the beginning of the night, and one for each of the twelve hours. Throughout the Calendar a star occurs in one of seven positions, "the middle," the right eye, ear or shoulder, or the left eye, ear or shoulder. The position is not merely described in words, but graphically indicated. The perpendicular line passing through each of the positions corresponds to the limb of a sitting figure, which is drawn underneath the diagram, and represented as facing the spectator. The line of "the middle" passes through its axis.

If the text were Greek instead of Egyptian, there never would have been a doubt as to what was meant by a star being in "the middle." The verb *μεσοῦν*, "to be in the middle," when applied to sun, moon, or star, is equivalent to *μεσουρανεῖν.* Agamemnon in the Iphigenia in Aulis asks, *τίς ποτ' ἄρ' ἀστὴρ ὅδε πορθμεύει;* and he is answered—

Σείριος, ἐγγὺς τῆς ἑπταπόρου
Πλειάδος ᾄσσων, ἔτι μεσσήρης.

A star is in the middle of its course or in mid-heaven at the moment of its *transit* or *culmination.* The technical expression for this in the Egyptian Calendar now before us is  *er āk*, literally "in the middle."[1] A synonymous expression or *āmtu* appears to be used in the same sense in another very curious document, which I shall speak about later on.

[1] This explanation, which I first published in the *Chronicle*, January 25, 1868, was promptly recognised by M. Chabas as the true one. It has also been adopted by Dr. Brugsch in his Dictionary, and has not been controverted by any Egyptologist.

This explanation of the expression "the middle" is the key to the whole Calendar. As the earth turns upon its axis in very nearly four minutes less than twenty-four hours, a star which to-day culminates at six o'clock will in fifteen days culminate very nearly at five, or it loses about an hour in position every fifteen days. Accordingly in our Calendar the *head* of *Sahu*, for instance, which culminates at the eleventh hour in the first column of the month Thoth, does so at the tenth hour in the second column of the same month, and the entries in each successive column imply the loss of an hour.

The entries, however, do not by any means always place a star in the same position which it held in the previous column. The *head of Sahu*, which was in the middle in the second column of Thoth, is on the right eye on the 1 Paopi at the ninth hour, on the left eye on the 16 Paopi at the eighth hour, and again in the middle both on the first and the sixteenth of Athyr, at the seventh and sixth hours respectively. The *head of the Two Stars* is in the middle at the twelfth hour on the first night of Paophi, on the right shoulder at the eleventh hour on the sixteenth night of Paophi, and in the middle once more at the tenth hour of the first Athyr. The conclusion which I draw from these facts is that "right eye," "left shoulder," and the like, signify certain relative *short* distances from the meridian; "left eye" being nearer to the meridian than "left ear," and this again less distant from the meridian than "left shoulder." Even this extreme distance from the meridian must have been *short*, for a star which is said to culminate at the twelfth hour on the first night of a month, and two hours later on the thirty-first night, cannot possibly be many degrees distant from the meridian at the eleventh hour of the sixteenth night. This is true, even upon the supposition that the hours of the Calendar may vary in length according to the season.[1] It must, moreover, be remembered that in the climate of Thebes the difference between the lengths of

[1] To this element of uncertainty we must add the doubt whether the actual hours of the night were marked out to the observer by any instrument of precision.

days and nights is not so great as in northern climates, and that the difference between the twelfth parts of the longest and of the shortest night in that latitude does not amount to many minutes.

The whole Calendar then, in my opinion, records nothing but real or approximate transits of stars. Once in the course of every fifteen nights, the observer appears to have noted down, at each successive hour, the name of the principal star which was either actually upon the meridian or close to it. We do not know how he determined his meridian, what instrument he used, or by what contrivance he limited the field of his observation. But he seems to have noted the passage of stars over seven different vertical lines. If a star were crossing the first line, beginning from the east, it was noted down as being on the left shoulder; if it were on the fourth line which represented the meridian, it was put down as in the middle; if on the fifth, it was "on the right eye," and so on.

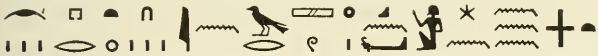
This general view of the document is open to no serious objection that I am aware of. There are, however, difficulties to be encountered as soon as we endeavour to understand all the details. Part of these difficulties arise from the state of the text. We are not in possession of the original, or even of a copy intended for general perusal. Our copies were made inside tombs, and were never intended to be seen by mortal eye after the tomb was once closed. The Egyptian texts, which were made under these conditions, are always grossly inaccurate. The inaccuracy often arises from the ignorance or carelessness of the artist; but it is as often occasioned by the text being made subordinate to decorative effect. The two texts we possess betray the most shocking confusion between the Egyptian signs for "right" and "left." This is perhaps the less to be wondered at when we sometimes find two such exceedingly intelligent and accurate scholars as Champollion and Lepsius at variance on this very point in their copies of the same text. The graphic indication of the position of stars is absolutely worthless in the tomb of Rameses IX; in the tomb of Rameses VI some portions of this part of the work are

carefully done, others most negligently. Some of the entries are manifestly made at the wrong hour. At the beginning of the first night of Pachons, for instance, *Menat* is said to be on the "left ear," whereas two hours later it appears on the "right eye." The correct entry at the beginning of the night would be *Many Stars*. *Menat* is also a manifest error at the beginning of the sixteenth night of Pharmuthi.

If the artist ever discovered his mistake he made no erasures: the only approach to a correction which he made was as follows:—at the fifth hour of the night of Epiphi, having placed a star on the right eye instead of in the middle, as his text says, he subsequently added a second star in the middle line without effacing the first. At the sixth hour of the sixteenth Phamenoth, Menat is said to be "in the left middle." The artist, after having written "in the middle," discovered that he should have said "on the left ear"; but instead of effacing "middle" and substituting "ear," he left the word he had written and added the adjective "left," which in Egyptian always follows the noun. At the seventh hour of the sixteenth Payni the artist has skipped a line, and put down the star belonging to the eighth hour, and the only compensation for this blunder is the insertion at the eighth hour of the entry which ought to have been made at the seventh. "Il a sacrifié," as M. Biot says of the artist of Rameses IX, "le sens du document, qui apparemment ne lui importait guère, à la symétrie du dessin."

For a vast number of errors like these the original Calendar is not to be held responsible. But even this document no doubt may have contained very serious errors. It suggests many questions, which we have unfortunately no means of answering. Is it the work of one man or of several? Are all the entries made from direct observation, or have some of them been deduced from observations already made? Were all the observations corresponding to the entries of each column made on the same night? How was the time for each observation determined? These are but specimens of important questions which naturally arise from the inspection of the Calendar, and on which it is impossible even to hazard a guess.

This is, however, the proper place to mention another interesting document, to which I have already alluded. There is in the British Museum a calcareous stone, No. 5635, upon which a note in hieratic character gives the names of certain persons who observed the transit of the *Star of the Waters* from the fifth Phamenoth till the seventh Payni of some year of an unknown king. There are thirteen entries altogether, and all in the following form:—[1]



Abt 3 *pirt* 13 *àn urśu Ken seb en mā àmtu*, "on the 13th Phamenoth —by the observation of Ken—the *Star of the Waters* in the middle." The observations recorded were made on the 5th, 6th, and 13th Phamenoth, the 7th, 9th, and 13th Pharmuthi, the 16th and 23rd Pachons, the 5th, 16th, and 21st Payni, and the 4th and 7th Epiphi. The names of the observers are Nebnefer, Pennub, Ken, Penamen, Nechtu, Het, Mes, Nebsemennu, Panebtmâ. No indication is given of the hours at which the observations were made, or of the name of the reigning king.

The names of the constellations and stars mentioned in our Calendar are as follow:—

1. Necht, with his feathers, top of sceptre, neck, back, knee and footstool.
2. Arit.
3. The Goose, with its head and rump.
4. The Chu.
5. Sârit.
6. Sahu.
7. Sept (Sothis) and its train.
8. The Two Stars.
9. The Stars of the Water.
10. The Lion, with its head and tail.
11. The Many Stars.

[1] Dr. Birch first called attention to this stone in the *Zeitschrift f. Ægypt. Sprache*, 1868, p. 11. His transcription, however, of the passage here quoted omits the important sign ▬, which gives to the group ┼▬ *àmtu* the sense of "in the middle." Cf. my paper on the Egyptian prepositions, Trans. Soc. Bib. Arch. II, 301.

12. The Lute Bearer.
13. Menat, with his scouts and followers.
14. The Hippopotamus, with its two feet, leg, pizzle, thigh, breast, tongue, and feathers.

Some of these constellations must have been of enormous extent. The entries for the whole of the first night of Epiphi are confined to stars belonging to the Hippopotamus and Necht. The head and rump of the Goose culminated at an hour's distance from each other, and Sahu and the Lion have also two entries each in the nights when they are mentioned.

The Egyptian constellations of the northern sky, the *Thigh* (Great Bear) and the *Leg* (corresponding, I believe, to Cassiopeïa) do not appear at all in this Calendar, which probably contains only stars more closely approaching the equator. Two of them are known to us independently of this Calendar; Sahu is Orion and Sothis is Sirius.

From the acknowledged identity of Sothis and Sirius I endeavoured, some years back, first of all to ascertain the date at which the Calendar was drawn up, and, secondly, to identify a certain number of the asterisms which it contains.

The method which I adopted was this: "Whatever may have been the length of the Egyptian hours of the night, the sixth hour undoubtedly corresponds to midnight. Now Sothis, that is Sirius, is said by the Calendar to be 'in the middle' at the sixth hour in the first column of the month Choiak, the fourth Egyptian month. The question, therefore, arises—in what year did Sirius culminate at midnight at Thebes within the first fifteen days of the Egyptian month Choiak?[1] Through the very great kindness of the Astronomer Royal and of his First Assistant, Mr. Stone, to whom I am also indebted for a table of the approximate Right Ascensions of certain stars which I had specified, I am able to say this transit took place about the year 1450 before Christ. This inference of date, as the Astronomer Royal remarks, is necessarily a very vague one ..... but from

[1] "Les dates de jours et d'heures," says M. Biot, "ne peuvent être rigoureusement applicables qu'à une seule des nuits comprises dans la quinzième désignée, sans que le tableau nous apprenne quelle est cette nuit là."

the whole nature of the case a vague date is all that can be asked for. It is sufficient for us to know that the Calendar records observations of the fifteenth century before Christ, or thereabouts. It does not at all follow that the tomb of Rameses VI is of the same antiquity. The very same Calendar was found in the more recent tomb of Rameses IX, and it may have been inscribed on much earlier tombs. The decorators of those magnificent chambers did not think it necessary to alter the document in consequence of the changing positions of the heavenly bodies."[1] Many successive editions of a popular work like Keith on *The use of the Globes*, reproduce in like manner, without the least alteration, the same "Table of the culminating of the Zodiacal Constellations on the first day of every month, and the Semi-diurnal Arc in London."

The approximate date of the Calendar being known, the next question is, what remarkable stars at that date culminated at the intervals before and after Sirius, which are assigned by the Calendar to its asterisms? And finding, for instance, that in 1450 B.C. the approximate Right Ascension of α Arietis was $23^h\ 5^m$, whilst that of Sirius was $4^h\ 11^m$ (the difference therefore being $5^h\ 6^m$), I have no hesitation in identifying α Arietis with the *Goose's head*. In the same manner I identify *Arit* as probably β Andromedæ, the *Chu* (a group of stars) with the Pleïads, *Sârit* with α Tauri (Aldebaran), the *Lion* with part of our own constellation of the same name, the *Many Stars* with part of the Coma Berenices, the *Lute Bearer* with α Virginis: α Boötis and α Scorpionis are probably parts of the Constellation *Menat*. Castor and Pollux, which at the present day come to the meridian about three-quarters of an hour after Sirius, seem at first sight to claim identity with the *Two Stars*, but their position in the sky with reference to Sirius was quite different at the time of our Calendar to what it is at present.

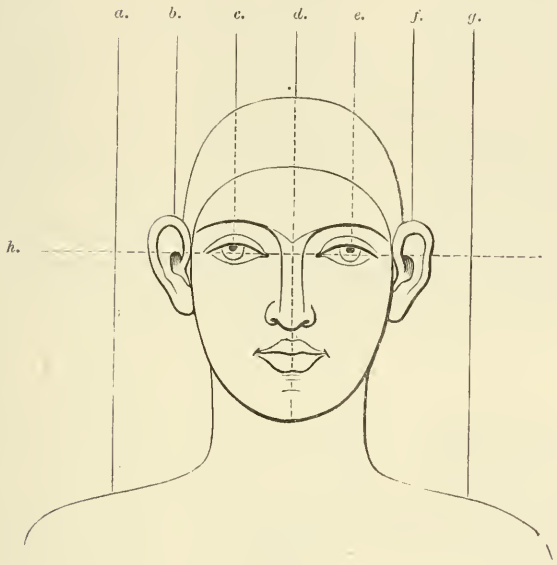
It is not necessary to give the process by which each of these results has been attained. If the method I have indicated be the right one, the results can easily be verified

[1] *Chronicle*, Vol. II, p. 82.

and corrected, if necessary, by any one who is familiar with astronomical science.

I have only to add that the translation of the Calendar is made from the text of the Tomb at Biban-el-moluk, numbered IX in the *Denkmaeler* of Dr. Lepsius. The first columns of Thoth and Phamenoth, which fail in this text, are supplied from the text of Tomb VI. The latter text contains only the months of Thoth, Paopi, Athyr, Payni, and portions of Epiphi and Phamenoth. The month of Mesori is destroyed in both tombs. Each text has very serious defects peculiar to it, but some defects are common to both, and show that the Calendar was already corrupt at the date of the earlier tomb. The star Sârit, for instance, is confounded in certain columns with the star Arit, which culminates four hours earlier.

Diagram to illustrate the Phrases used in the Egyptian Astronomical Calendar.



		a.	b.	c.	d.	e.	f.	g.
a.	Left shoulder	*						*
b.	Left ear		*				*	
c.	Left eye					*		
d.	In the middle				*			
e.	Right eye			*				
f.	Right ear...		*					
g.	Right shoulder	*						

1 THOTH. (Only found on Tomb VI.)

		a.	b.	c.	d.	e.	f.	g.
Beginning of Night	the two feathers of Necht							
Hour 1, head of the sceptre of Necht	on the [ ] ear							
,, 2, his neck	in the middle				*			
,, 3, his back	in the middle				*			
,, 4, his knee	on left shoulder						*	
,, 5, his footstool	on left eye					*		
,, 6, Arit	in the middle				*			
,, 7, head [of Goose]	in the middle				*			
,, 8, its rump	on right eye			*				
,, 9, star of Chu	in the middle				*			
,, 10, star of Saret	in the middle				*			
,, 11, head of Sahu	in the middle				*			
,, 12, star of Sahu	on the [ ] shoulder							

16–15 THOTH.

		a.	b.	c.	d.	e.	f.	g.
Beginning of Night	head of Necht	on left eye				*		
Hour 1, his neck	on left eye					*		
,, 2, his back	in the middle				*			
,, 3, his knee	on left shoulder							*
,, 4, his footstool	in the middle				*			
,, 5, Arit	on left eye					*		
,, 6, head of Goose	in the middle				*			
,, 7, its rump	ditto				*			
,, 8, star of the Chu	in the middle				*			
,, 9, star of Arit	on left eye					*		
,, 10, head of Sahu	in the middle				*			
,, 11, star of Sahu	in the middle				*			
,, 12, star of Sothis	on right shoulder	*						

1 Paopi.

		a.	b.	c.	d.	e.	f.	g.
Beginning of Night	neck of Necht in the middle				*			
Hour 1,	his back on left eye					*		
,, 2,	his knee in the middle				*			
,, 3,	his footstool in the middle				*			
,, 4,	Arit in the middle					*		
,, 5,	head of Goose on left eye					*		
,, 6,	its rump in the middle			*	*			
,, 7,	star of the Chu in the middle			*	*			
,, 8,	star of Sâr on right eye				*			
,, 9,	head of Sahu on right eye		*					
,, 10,	star of Sahu on right eye		*		*			
,, 11,	star of Sothis on left eye		*		*			
,, 12,	head of the Two Stars in the middle							

16–15 Paopi.

		a.	b.	c.	d.	e.	f.	g.
Beginning of Night	back of Necht in the middle				*			
Hour 1,	knee of Necht in the middle				*			
,, 2,	his footstool in the middle				*			
,, 3,	Arit on left eye					*		
,, 4,	tuft of Goose on left eye			*				
,, 5,	its rump in the middle				*			
,, 6,	star of the Chu on left eye					*		
,, 7,	star of Sâr on left eye					*		
,, 8,	head of Sahu on left eye				*			
,, 9,	star of Sahu on left shoulder							*
,, 10,	train of Star of Sothis on left[1] shoulder	*						
,, 11,	head of the Two Stars on right shoulder	*						
,, 12,	stars of the Water in the middle				*			

[1] "Right," according to Champollion.

1 Athyr.

		a.	b.	c.	d.	e.	f.	g.
Beginning of Night	foot of Necht in the middle				*			
Hour 1, his footstool	in the middle				*			
„ 2, Arit	on left eye					*		
„ 3, head of Goose	on left eye					*		
„ 4, its rump	in the middle				*			
„ 5, star of the Chu	in the middle				*			
„ 6, star of Arit	in the middle				*			
„ 7, head of Sahu	in the middle				*			
„ 8, star of Sahu	on right eye			*				
„ 9, train of Star of Sothis	on left eye					*		
„ 10, head of the Two Stars	in the middle				*			
„ 11, stars of the Water	in the middle				*			
„ 12, head of the Lion	in the middle				*			

16–15 Athyr.

Beginning of Night	footstool of Necht in the middle				*			
Hour 1, Arit	on left eye					*		
„ 2, head of Goose	in the middle				*			
„ 3, its rump	in the middle				*			
„ 4, star of the Chu	in the middle				*			
„ 5, star of Sârit	on right eye			*				
„ 6, head of Sahu	in the middle				*			
„ 7, star of Sahu	on left eye					*		
„ 8, train of Sothis	on left eye					*		
„ 9, head of Two Stars	in the middle				*			
„ 10, stars of the Water	in the middle				*			
„ 11, head of the Lion	in the middle				*			
„ 12, his tail	in the middle				*			

1 Choiak.

		a.	b	c.	d	e.	f	g.
Beginning of Night } Arit	on (. . . .?)			*				
Hour 1, head of Goose	in the middle			*				
„ 2, its rump	on left eye			*				
„ 3, star of Chu	on left shoulder					*		
„ 4, star of Sarit	on left shoulder							*
„ 5, star of Sahu	on right eye							*
„ 6, train of Sothis	in the middle			*				
„ 7, head of Two Stars }	on right shoulder				*			
„ 8, the Two Stars	on left eye	*						
„ 9, stars of Water	on left ear					*		
„ 10, head of Lion	on left shoulder						*	
„ 11, his tail	on left shoulder							*
„ 12, the Many Stars	on the right [ ]							*

16–15 Choiak.

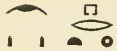
Beginning of Night } head of Goose	in the middle				*			
Hour 1, its rump	in the middle				*			
„ 2, star of Chu	on left ear						*	
„ 3, star of Sârit	on left ear						*	
„ 4, star of Sahu	in the middle				*			
„ 5, star of Sothis	on left shoulder							*
„ 6, Two Stars	on left shoulder							*
„ 7, stars of the Water }	on right eye			*				
„ 8, head of the Lion	on right eye			*				
„ 9, his tail	on right eye			*				
„ 10, the Many Stars	in the middle				*			
„ 11, Lute-bearer	in the middle				*			
„ 12, scouts of Menat	in the middle					*		

1 Tybi.

		a.	b.	c.	d.	e.	f.	g.
Beginning of Night, its rump	in the middle				*			
Hour 1, star of Sârit	on right eye			*				
„ 2, head of Sahu	in the middle				*			
„ 3, star of Sahu	on left eye					*		
„ 4, train of Sothis	on right eye			*				
„ 5, the Two Stars	on right ear		*					
„ 6, star of the Water	on right ear		*					
„ 7, head of Lion	on right eye			*				
„ 8, his tail	in the middle				*			
„ 9, the Many Stars	in the middle					*		
„ 10, Scouts of Menat	on right [shoulder]	*						
„ 11, Menat	on right eye			*				
„ 12, followers of Menat	on right eye			*				

16–15 Tybi.

		a.	b.	c.	d.	e.	f.	g.
Beginning of Night, head of Sahu	on right ear		*					
Heur 1, star of Sahu	on right shoulder	*						
„ 2, star of Sothis	in the middle				*			
„ 3, head of the Two Stars	in the middle				*			
„ 4, the Two Stars	on right ear		*					
„ 5, stars of the Water	in the middle				*			
„ 6, head of Lion	in the middle				*			
„ 7, his tail	on left eye					*		
„ 8, the Many Stars	in the middle				*			
„ 9, scouts of Menat	on right shoulder			*				
„ 10, Menat	on right eye							
„ 11, followers of Menat	on right shoulder	*						
„ 12, foot of Hippopotamus	on right shoulder	*						

1 MECHIR. 

		a.	b.	c.	d.	e.	f.	g.
Beginning of Night } star of Sahu	{ on right shoulder	*						
Hour 1, star of Sothis	on left ear						*	
„ 2, the Two Stars	on right ear		*					
„ 3, stars of the Water }	on right eye			*				
„ 4, head of Lion	on right ear		*					
„ 5, Many Stars	in the middle		*					
„ 6, Lute-bearer	in the middle				*			
„ 7, scouts of Menat	in the middle				*			
„ 8, Menat	on right ear				*			
„ 9, followers of Menat }	in the middle		*					
„ 10, foot of Hippopotamus }	.....							*
„ 11, between Menat	(*sic*)			*				
„ 12, its thigh	middle				*			

[*The Second Column of the Month of Mechir is extremely mutilated in Tomb IX, and is quite destroyed in Tomb VI.*]

1 PHAMENOTH. (From Tomb VI.)

		a.	b.	c.	d.	e.	f.	g
Hour 3, ...	.....							
„ 4, ...	.....							
„ 5, Scout.	....							
„ 6, Menat	.....							
„ 7, follower of Menat	on right eye			*				
„ 8, feet of Hippopotamus	on right eye			*				
„ 9, its leg	in the middle				*			
„ 10, between its legs	in the middle				*			
„ 11, its thigh	in the middle				*			
„ 12, its breast	in the middle				*			

16–15 PHAMENOTH.

Beginning of Night	.....			*				
Hour 1, the Two Stars	on the left ...					*		
„ 2, his tail	in the middle				*			
„ 3, the Many Stars	in the middle				*			
„ 4, Lute-bearer	in the middle				*			
„ 5, Scouts of Menat	on left eye						*	
„ 6, Menat	in middle left (*sic*)						*	
„ 7, ...	on left						*	
„ 8, ...	.....							
„ 9, ...	.....							
„ 10, ...	.....							
„ 11, ...	.....							
„ 12, ...	.....							

PHARMUTHI 1.

		a.	b.	c.	d.	e.	f.	g.
Beginning of Night } head of Lion	in the middle				*			
Hour 1, his tail	on right eye			*				
„ 2, Many Stars	on left eye			*				
„ 3, Lute-bearer	on left eye					*		
„ 4, Scouts of Menat	right eye					*		
„ 5, follower of Menat	left eye			*				
„ 6, two feet of Hippopotamus }	on right eye			*				
„ 7, its leg	in the middle				*			
„ 8, between Menat its feet }	in the middle				*			
„ 9, its thigh	in the middle				*			
„ 10, its breast	on left ear						*	
„ 11, its tongue	on left arm	*						
„ 12, the two feathers of Necht }	on left ear							

PHARMUTHI I. 16–15.

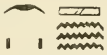
		a.	b.	c.	d.	e.	f.	g.
Beginning of Night } Menat	on the left . . .						*	
Hour 1, Many Stars	on right eye			*				
„ 2, Lute-bearer	on left eye					*		
„ 3, Scouts of Menat	on left eye					*		
„ 4, follower of Menat	on right eye			*				
„ 5, two feet of Hippopotamus }	on right eye			*				
„ 6, its leg	in the middle				*			
„ 7, its pizzle	in the middle				*			
„ 8, its thigh	on left shoulder							*
„ 9, its breast	left shoulder						*	
„ 10, its tongue	left shoulder							*
„ 11, head of the feathers of Necht }	left						*	
„ 12, top of the staff of Necht }	left			*				

1 PACHONS.

		a.	b.	c.	d.	e.	f.	g.
Beginning of Night } Menat	on left ear						*	
Hour 1, Scouts of Menat	on right eye					*		
„ 2, Menat	on right eye			*				
„ 3, follower of Menat	right eye			*				
„ 4, feet of Hippopotamus }	in the middle				*			
„ 5, its leg	in the middle				*			
„ 6, its pizzle	left ear						*	
„ 7, its thigh	left shoulder							*
„ 8, its breast	left ear						*	
„ 9, its two feathers	left ear						*	
„ 10, head of the two feathers of Necht }	left						*	
„ 11, two feathers of Necht }	left ear	*						
„ 12, top of the staff of Necht }	right ear	*						

PACHONS 16–15.

Beginning of Night } Scout	on right eye			*				
Hour 1, Menat	on left eye					*		
„ 2, follower of Menat	on right eye			*				
„ 3, feet of Hippopotamus }	in the middle				*			
„ 4, its leg	in the middle				*			
„ 5, its pizzle	on left shoulder							*
„ 6, its thigh	on . . . shoulder							*
„ 7, its breast	. . . . ear		*					
„ 8, its two feathers	left ear						*	
„ 9, head of two feathers of Necht }	right ear		*					
„ 10, two feathers of Necht }	right ear		*					
„ 11, top of his staff	middle			*				
„ 12, his throat	. . . . shoulder	*						

1 Payni. 

		a.	b.	c.	d.	e.	f.	g.
Beginning of Night } Menat	middle							*
Hour 1, feet of Hippopotamus }	middle				*			
,, 2, its leg	right eye			*				
,, 3, its [pizzle]	middle				*			
,, 4, its thigh	middle				*			
,, 5, its breast	right eye			*				
,, 6, its tongue	right eye			*				
,, 7, its feathers	left ear							*
,, 8, head of feathers of Necht }	left ear		*					
,, 9, two feathers of Necht }	middle				*			
,, 10, his throat	middle				*			
,, 11, its breast	middle				*			
,, 12, his back	middle				*			

Payni 16–15.

Beginning of Night } feet of Hippopotamus }	middle				*			
Hour 1, its leg	middle				*			
,, 2, its [pizzle]	middle				*			
,, 3, its thigh	middle				*			
,, 4, its breast	left eye					*		
,, 5, its tongue	left eye					*		
,, 6, feathers	left ear						*	
,, 7, two feathers of Necht }	right ear		*					
,, 8, top	middle				*			
,, 9, his throat	middle				*			
,, 10, breast	left shoulder							*
,, 11, his back	left ear						*	
,, 12, his leg	middle				*			

1 Epiphi.

		a.	b.	c.	d.	e.	f.	g.
Beginning of Night .... of Hippopotamus	right eye					*		
Hour 1, its thigh	middle				*			
„ 2, breast	right eye			*				
„ 3, tongue	middle				*			
„ 4, its feathers	middle				*			
„ 5, head of feathers of Necht	middle				*	*		
„ 6, two feathers of Necht	right eye					*		
„ 7, his neck	middle				*			
„ 8. breast	middle				*			
„ 9, his back	middle				*			
„ 10, his leg	right eye					*		
„ 11, his sebekes (?)	middle				*			
„ 12, his footstool	middle				*			

Epiphi 16–15.

Beginning of Night	.....							
Hour 1, its breast	middle				*			
„ 2, tongue	middle				*			
„ 3, its feathers	middle				*			
„ 4, head of Necht	middle				*			
„ 5, two feathers of Necht	left eye					*		
„ 6, his throat	middle				*			
„ 7, breast	middle				*			
„ 8, his back	middle				*			
„ 9, his leg	middle				*			
„ 10, ...	.....			*				
„ 11, ...	.....			*				
„ 12, ...	middle				*			

In the discussion which followed the reading of this paper, it was suggested by the Rev. Basil Cooper that the Calendar represented not the vague Egyptian year of 365 days, but a fixed one of the same length as our astronomical year. Into this question I do not wish to enter, but it is well to observe that the hypothesis of a fixed year does not affect the essential points on which I wish to insist.

1. The true philological meaning of the Calendar remains undisturbed.

2. The asterisms are identified by their relative positions in the sky, as indicated by the time of their culmination before or after Sirius and each other in the year 1450 B.C. For this identification the map of the sky in 1450 B.C. is *sufficiently* correct as regards any year within the millennium (2000–1000 B.C.) to which the royal tombs undoubtedly belong.

ON THE CYLINDRICAL MONUMENT OF NECHTHARHEBES IN THE MUSEUM OF TURIN.

By Joseph Bonomi.

Read 2nd June, 1874.

When I visited Turin in the autumn of last year, I did so with the intention of particularly examining some of the Egyptian monuments in the Museum of that capital, many of which I knew had not been published or described except in a brief but excellent handbook written by the late learned M. Orcurti, in 1852, "Catalogo dell' Museo di Torino." Among other fine Egyptian monuments in the Museum was the one of which I now present a drawing to the Society. This antiquity is a large disk, or rather cylinder, of dark granite, 3′ 4½″ in diameter by 10½″ in the upper and 1′ 3″ in the lower periphery.

The upper cylinder is completely covered with 68 vertical lines of beautifully executed hieroglyphics, divided into four unequal sections by as many vignettes, representing an Egyptian monarch and an attendant priest, who is probably his son, making a libation before an altar to the deities of the four cardinal points or quarters of the land, North, South, East, and West; these deities, together with the names of the towns in which they were venerated, being represented in the hieroglyphic inscriptions which occur between each picture. They are nearly all goddesses or feminine forms of the different divinities worshipped in Upper Egypt. The style of art is excellent, although not archaic, and it does not need the evidence of the half

obliterated cartouch of the Pharaoh Nectanebos to prove that it is a work of the XXXth Dynasty, that is, the Persian period. The subjects are well grouped, and in all the representations of the younger figure, there is drawn a peculiar article of dress which I do not recollect to have met with in any other Egyptian intaglio or painting. This unique vestment is a long narrow scarf or cloak worn round the waist, and having one end thrown over the left arm of the officiant; its shape and use are singular, reminding one strongly of the linen maniple used by the catholic clergy. The upper surface or top of this monument is roughly depressed, and in the centre there has been cut a square hole having several irregular lines radiating from it; but as these marks seemed to be of a recent date, I did not examine them closely, concluding that, like the slab No. 135* in our own collection in the British Museum, which is similarly mutilated,[1] the Arabs had used it for a mill-stone. I now regret this omission on my part, as it has been suggested to me since my return that the monument might possibly have been a sun-dial, in which case it would certainly prove the oldest on record, and the first ancient dial of Pharaohonic times hitherto discovered in Egypt. Orcurti describes it as "un altare nero," under which title it is generally known, but which its great size and remarkable form render somewhat unlikely.[2] In the long inscription of Una,[3] a monarch of the VIth Dynasty, there is distinctly described a very great monolithic altar, of which there now exist no remains, and that a similarly large monument is preserved in the Museum of Boulaq,[4] and this being the case, Orcurti may after all be right in his description of the object.

I cannot conclude this brief note without publicly acknowledging the courtesy of the Curator of the Turin Museum,[5] who offered me every assistance in obtaining impressions

[1] Sharpe, Egyptian Antiquities in the British Museum, p. 89.

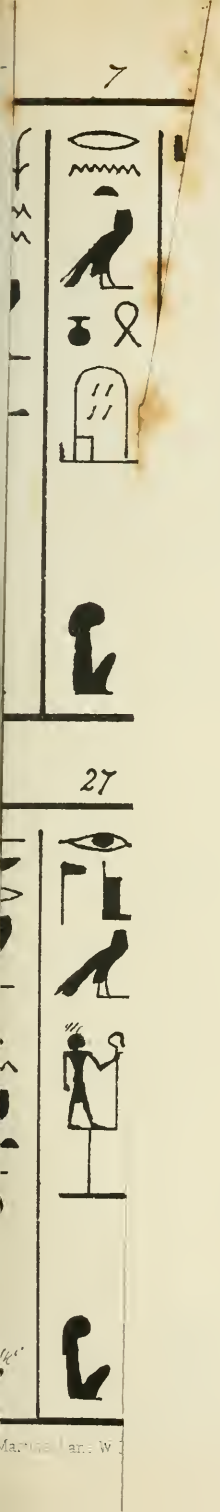
[2] *Catalogo Monumenti diversi*, No. 23, p. 80.

[3] See Records of the Past, vol. ii, p. 3.

[4] Description de la Musée de Boulaq. No. 95, p. 97.

[5] Cavaliero Fabretti.

of this and other Egyptian relics; and I must further also thank our President, Dr. Birch, for having at so short a notice prepared the translation of the Egyptian text which follows my paper, and to which I shall listen with peculiar interest.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20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
A
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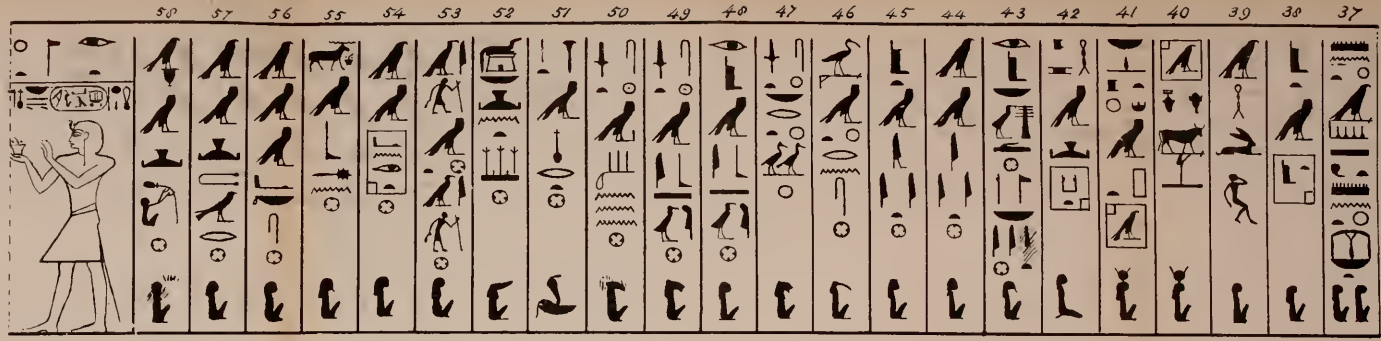
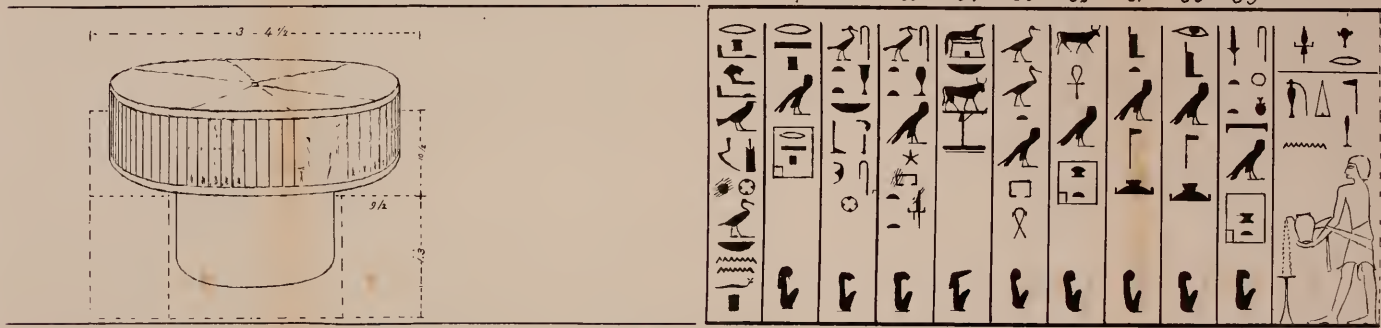
Face page 424





TRANSLATION OF THE HIEROGLYPHIC INSCRIPTION UPON THE ALTAR OF NECHTHARHEBES.

By S. Birch, LL.D.

Read 2nd June, 1874.

Mr. Bonomi, in addition to the base of the altar at Turin, which he copied on his recent visit to that city, has laid before the Society a second inscription, which is found on a cylindrical monument, the use of which is not known. The monument terminates below in a smaller plug or cylinder, as if it fitted into some other portion of stone. The upper surface has a number of lines running from the centre like the spokes of a wheel; but these radii are not sufficiently well made to have formed part of the original design of the monument, or it might otherwise have been conjectured that the object was a dial. The circular face of the upper or larger cylinder has round it small scenes or pictures and 68 perpendicular lines of hieroglyphics, the names and titles of as many deities, and their adoration by the monarch Nekht-har-hebi or Nechtharebes I. of the XXXth Dynasty. It is in fact a kind of register or calendar of the principal deities of Egypt to whom the monarch addresses his offerings. These comprise all the leading gods of Egypt. It does not appear to be known whence it came, so that even the temple for which it was made is unknown. The order followed is that of the cardinal points of the compass, beginning with the South, which was placed by the Egyptians before the North, on account of the civilisation and emigration of the earlier settlers having been directed to the South from the North. In this respect the Egyptians followed the

same plan as the Chinese, whose compass is also adjusted from the South, that being the leading point to which it may have been supposed that it acted as a guide. There is no proof, however, of the Egyptians having had any knowledge of the use of the magnet, although it was found and worked by the Egyptians and their neighbours or contemporaries the Babylonians. Now there is one remarkable thing in the present monument. It was evidently placed so that the sides respectively faced the four quarters of the compass, and these points are indicated still more strictly by placing the hieroglyphs indicating them facing the deities of the quarters, while the rest of the inscription reads in the other direction. Such a variation must have had a special object, perhaps to indicate the actual South, tangential points of the S. W. N. E. on the periphery of the altar. As in the case of the inscription already communicated by Mr. Bonomi to the Society, many of the towns and places named are contributions to the knowledge hitherto possessed of Egyptian geography, and also of the local deities who particularly presided over them. They are given in the vertical lines, each god being mentioned along with his district.

The scene preceding the register is uniform in all cases.

A priest or prophet offers a libation of water out of the vessel with a spout, called in Egyptian *namms*, on a small stand or altar stone. Two streams flow from the spout, and these two jets had no doubt an esoteric meaning. The priest wears a scull cap *namms*, and a panther skin *anem en abu* wrapped round the loins, the tail of the skin is thrown over the left fore-arm of the priest. The inscription before him reads *Ta kabh en hent neter* "the giving of a libation by the prophet." The prophet is followed by the king, who holds in his hand an incense vase, cup-shaped, in which is seen a flame and two grains of incense. The king raises his left hand. He wears on his head the royal head-dress *namms*, surmounted by the uræus serpent, a tunic *shenti*, round the loins and a tail-shaped ornament descending from his waist. Before him are his name and title. The good god, lord of the two countries, NEKHT-HER-HEBI beloved of

Anhar or Ōnouris the Egyptian Mars. The large horizontal line above his head expresses 'making divine ceremonies in the South,' or 'making to the gods of the cycle over the South.' Then follow the names of the gods of the South.

A.

LINE

1. Nut in the abode of Nut.
2. Nebankh in the heaven resident in Ka [Athribis].
3. Amen in Ha . t . Amen [abode of Amen, Thebes].
4. Osiris in Aat kabh [Elephantine].
5. Sebak in Rukama.
6. Anemher in Ar-ma.
7. Ran t in the Hat-shennu [abode of granaries].
8. Nunu t in Hat.
9. Amen in Hat mehn.
10. Rant in Aat rant.
11. Ant who loves her mother.
12. Nubn or Nuhem in Nishem [Eileithya].
13. Tenem dwelling in Ab-kat.
14. Merhu presiding over Nahes or Hes.
15. The kha neter or Thousand gods in Ha kha.
16. Uat [Buto] in Ha-uat [Buto].
17. Khem in Per-khem [Panopolis].
18. [Seb] in Sha-har.
19. [Thoth] in Sesen [Hermopolis].
20. . . . . in Shept [Oxyrrhyncus].
21. [Isis].
22. [Athor].
23. . . . . .

B.

Same scene to the gods of the West.

24. Ha ma. [Lions] in the upper abode of the Empyreal region.
25. Khent khratu lord of the foreign land Khaset.[1]
26. Sebak proud lord or lord of Tenten
27. Osiris in Atai[2] [Busiris].

[1] In the Tentyrite nome. Brugsch, Geogr. I, 251.
[2] The Ninth Northern nome. Ibid. I, 123, 4.

LINE

28. Sekar in Shenut.[1]
29. Khonsu in Kentu.
30. Athor mistress of Mafka [Sinai].
31. Neith mistress of Khem ka [Sinopion oros].
32. Sebak lord of Ru.
33. Sebak in Hat neha t [Tentyris].
34. Sebak in Smen [Memphite nome].
35. Sekhet in Nefer shuu.

C.

Same scene to the gods of the North.

36. Things of the gods and divine clothes.
37. The clothes, sacred wraps, and festival garments.
38. Isis in Hat hesi [Libyan nome].
39. Horus the boy.
40. Athor resident in Aha [Athribis].
41. Neb hetp in Hat-athor [Tentyris].
42. Hapi [the Nile] in Aat ha-kat [Saitic Branch of Nile].
43. Osiris lord of Tattu [Busiris], great god lord of Abuti [Abydos].
44. Har [Horus] in Ait.
45. Isis in Ait.
46. Thoth in Khetrans.
47. Sekhet in Rekhet [Thmuis].
48. Osiris in Bashu.
49. Sekhet in Bashu.
50. Sekhet in Amakhu or Sah [Hermopolis].
51. Uat [Buto] in Nefert.
52. Sebak lord of Aatensha [Prosopis].
53. Aa [Old Man] in Aat.
54. Horus in Hat ant [Antæopolis].
55. Ba in Bakhen.
56. Har [Horus] in Maks.
57. Har [Horus] in Aatur [Philæ].
58. Har [Horus] in Aat-ab [Abaton, Philæ].

The same scene to the gods of the East.

59. Sekhet, Nut in Hat nut.
60. Osiris in Neter aat [Menouthis].

[1] In the First Northern nome. Brugsch, Geogr. I, 150.

LINE

61. Isis in Neter aat [Menouthis].
62. Hapi ankh [living Apis] in Ha shaat or Ha-nut.
63. Bau t in Parsha.
64. Sebak in Ka [Athribis].
65. Bast or Sekhet in the Eastern empyreal region.
66. Bast or Sekhet mistress of Khabes.[1]
67. Reshpu [Reseph] in Hat reshpu.
68. The prince, the heir, the noble, chief of Anamat Bakennefi."

This name at the end of the inscription probably is that of the dedicator of the monument. This name Bakennifi occurs in the Stele of Piankhi, where he is also said to be chief of the troops.[2] In my former paper, Vol. III, Part 1, the town of Pa Kar was given as the "Arsenal" its meaning, the actual site is the Egyptian Babylon, of which it was the name.

[1] 'City of Lamps.' This expression recalls to mind the Feast of Lamps at Sais, but the site of Khaibes is unknown.

[2] See the Rev. Canon Cooke's "The Inscription of Pianchi," 8vo. London, 1873, page 22. Lieblein, Diction. d. noms Hieroglyph. Leipzig, 1871, page 332, No. 1016.

ASSYRIAN NOTES.—No. 1.

By H. F. Talbot, F.R.S., &c.

Read 2nd June, 1874.

§ 1. *On the ancient use of Papyrus as a writing material in Assyria and Babylonia.*

In vol. 1 p. 343 of the Transactions, Mr. Sayce has adduced reasons for supposing that papyrus was used in Babylonia for writing upon, as it was in Egypt, quoting the testimony of Pliny to that effect.

I have arrived at similar conclusions on other grounds. In vol. 2 of Rawlinson's B.M. inscriptions, plates 33 and 44, the word *alal* or *alallu* is explained by *nazabu sha kani* the plant of a reed;[1] which Mr. Sayce considers to mean *papyrus;* and it is also explained by , and by the same with 'a child' inserted, thus, which means perhaps a child's first book, elsewhere called *dippi resh*, 'tablet of the beginning,' or 'first tablet.'[2] In the same plate 2 R 33, col. iv, 1, we find . . *akkhuz sha tzu* 'peeling off the skin,' which words standing only two lines before *nazabu sha kani* appear to relate to the same subject. Their meaning is incontestable as they are often used in saying that the King flayed off the skins of his prisoners; see my Glossary No. 219. Thus in the first volume of Rawlinson's inscriptions pl. 19, 93 . . *akuz tzu-su* detraxi cutem ejus. The same is repeated in line 92 and in

[1] Arabic *nasab* or *nasb* 'to plant'; Hebrew and Syriac נצב.

[2] Mr. Sayce considers to mean 'water,' so that the sign would imply "papyrus growing in the water."

Oppert's Khorsabad inscriptions vi, 4. This verb *khuz* seems related to the Hebrew חוּץ the exterior of anything.

We find also the remarkable word *Nigin* 'a volume,' which is given in 2 R 34, 64 as the explanation of the symbol and of the similar symbol in 2 R 32, 15.

Nigin is explained in the former passage by the words *pakharu sha alali* 'a collection of papyri,' that is to say 'a Volume.' It is true that the last letter of the word *alali* is broken off, but I think my restoration is probable. Now, this is very strongly confirmed by the fact that the word *Nigin* is still retained in Chaldee with the meaning of *volume; history;* or *memoirs:* see Buxtorf's dictionary p. 1298. He says: נגינן *Niginin:* memoriæ: historiæ rerum gestarum. And since the word *nigin* explains the symbol it is probable that this symbol was originally a hieroglyphic representing *an open volume* (which it still greatly resembles). It is curious that this 'open volume' with *something indefinite* written in it, thus: is the symbol which is used to express 'so and so,' or 'any one': in French 'un tel'; as I pointed out for the first time in my Assyrian Glossary No. 285.

In another passage, writings upon 'vegetable skin' are mentioned, which I think must mean *papyrus.* This is found in 2 R 36, 11 where Assurbanipal apparently says that he copied his tablets 'according to the tenor (or aspect) of ancient tablets and *papyri* of Assyria and Accadia':

ki	pi	dippati	u	alali?
according to	*the tenor*	*of the tablets*	*and*	*papyri*

urati	gabri	Assuri
old	.....	*of Assyria*

u	Akkadi
and	*Akkad.*

Urati. The word *Ur* 'old' occurs frequently. It appears to be an Accadian term, and not Semitic. For example, it is said on the tablets K 137 and 52 *b*, and elsewhere, "I copied this tablet" *ura bi kim* "like its old one."

In 2 R 46, 13 we find the following gloss: 𒌋𒁹𒄀𒄭𒁹 . 𒁹𒄀𒄭 𒁹𒄀𒄭𒁹𒄀𒄭 𒁹𒄀𒄭𒁹𒄀𒄭 Ura. Labirtu. The latter word signifies "Old." *Gabri* is a frequent word, and generally means *Rivals, Equals*, or things *parallel* or *comparable* to one another. Applied to 'tablets' it appears to be the name which they gave to those *bilingual* tablets in which the two languages *alternate* in successive lines, which therefore are *parallel* to each other or stand *side by side.*

§ 2. *Assyrian books.*

That the Assyrians had books appears plainly from the passage I have given in the Transactions Vol. II, p. 55, "In the night-time bind around the sick man's head a sentence taken from a good book." But this writing may have been on *parchment*, since that would be more suitable for the other sentences, which were to be spread out 'on the threshold of the door.' (*ibid.*)

Again, among the goods which were to be held of no value as compared with the *mamit*, we find (see Transactions vol. 2, p. 41) 'the newly written books.' 𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹 . 𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹 𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹 *issish nikatbu*—4 R 7, 10. *Issish* means *newly*—see my Glossary No. 503. *Nikatbu* seems undoubtedly the passive of the verb *katab* כתב to write.

But the most copious source of information concerning Assyrian books is to be found in 2 R pl. 24, if I understand its meaning rightly.

I must premise that 𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹 *Gi* is known to be the Accadian equivalent of the Assyrian 𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹 *Kan*, a reed, Heb. קנה, Greek *κανυα*, Latin *Canna.* I believe that 𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹 and 𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹 meant (1) a Reed. (2) Reed-paper, or Papyrus. (3) a book written on such paper.

Mr. Sayce (p. 344) gives the following gloss; 𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹 . 𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹 𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹𒁹 i.e. *Gi* means "a written tablet," which

gloss is also referred to by Mr. G. Smith in his "phonetic values" No. 59.

Now, 2 R plate 24 contains a long list of names, 36 in number, but some of them imperfect or broken, all of which begin with this syllable . I consider therefore that we have here the catalogue of some ancient library.

I will give some specimens of this catalogue. It begins with some books on the Mysteries of the Babylonian Religion. The first of them is named, in the Accadian language, "*the Book of going to Hades*"; perhaps an account of the soul's adventures after death, similar to the Todtenbuch of the Egyptians. In analysing this name I observe that *du* means "to go" in Accadian, and that is probably the same as "*Hades*" (since both and have the phonetic value *di*). That the phrase means *Hades* can, I think, be proved thus: In the legend of Ishtar, Hades is called *Bit sha eribu-su la atzu*, the place whose entrance has no exit (or, which none can leave). Now, this phrase *la atzu* (no exit) is translated in Accadian (see 2 R 62, 42) "*without return*": which is the name of Hades—more usually written with the particle , in the form .

The three next volumes in the library were parts of one work, called the book of the *namniru*. This was the Accadian word for the *mamit* of the Assyrians, which was certainly some great mystery, but of what nature has not yet been explained. That there was salvation in the *mamit* I have already shown (Transactions Vol. II, p. 37). This is confirmed by the present passage, since the book on the *mamit* follows immediately the one on the descent of the soul to Hades.

The Assyrian translation of *gi namniru* is *kan mamiti*; where we observe, first, that *gi* is translated *kan* (papyrus), and secondly, that *namniru* is translated, as it usually is, by *mamitu*.

The next volume was called [illegible] *kan magarri* the book of worship, or "the Prayer Book." *Magar* is 'worship.' Impious persons or foreign heretics are called *la magiri*. The King of Assyria often calls himself *migir ili rabi*, worshipper of the great gods. *Makhar* or *makhir* 'to pray' is another form of the word; *ex. gr. Assur u Istar amkhur* 'I prayed to those gods.' *Amkhar sakuti Istar*, 'I prayed to the lofty Ishtar.'

After the "Prayer Book" comes [illegible] *kan tapsarti* 'the Book of Explanations,' probably a sort of commentary or Targum upon the sacred books. *Tapsarti* comes from the verb *pasar* 'to explain,' which is the Chaldee פשר. It is the verb specially used by the Assyrians in this sense; for example, A *libsur* B, that is to say, the (Accadian phrase) A *may be explained* by the (Assyrian phrase) B. This 'book of explanations' *kan tapsarti* is rendered in the Accadian column by [illegible]. [illegible] the book of [illegible]. I can only offer a conjecture as to this. [illegible] is 'the hand,' [illegible] 'to turn': hence [illegible] may mean Version or Translation or *Uebersetzung*.

The next volume in the Library was the [illegible] *kan tililti*, or Book of Hymns: from the Hebrew הלל 'to praise.' The same word (nearly) is found in Hebrew, viz. *Tilit*, a Hymn: see Gesenius v. תהלת.

The next was the [illegible] *kan mikhri*, another Prayer Book, from *mikhir* 'prayer.' Thus we see that the Library had a decidedly religious character. The rest of the Catalogue is of less interest, owing to the Assyrian column being broken off.

Before quitting this part of the subject I will give another example of the word [illegible] used for 'a written tablet or papyrus.' We read in 4 R 9 "This [illegible] *dippi*, or tablet, belongs to Ishtar-mu-kamish, chief of the tablets ([illegible]) of King Assurbanipal, son of Nebo-zir-sidi who was *also* chief of the books [illegible] or Chief Librarian.

Let us now pass on to other words illustrative of the literature of the Assyrians.

A tablet, or writing, was usually called which is explained in Syll. 114 by the words *Dubba* and *Lamú*. *Dubba* is the Chaldee דבא *tabula;* in Rabbinic literature *folium libri; pagina.* It is a word very frequently employed, ex. gr. *masal as dupti dabti* "a sentence out of a good book" (Transactions, vol. 2, p. 69). It is sometimes written *dubbat*, *duppat*, *dippat*, &c. The other word *Lamú* 'a writing' is found also in 2 R 24, 43. It is there explained again by the words and or *Dup*. In line 50 (a book) is rendered *zadu sha lamie*. This brings us to the word *zadu* (of uncertain meaning). It is also written *zaidu* in 2 R 24, 5 where it is explained 'the *ur* of a book,' and glossed by *nigin* (tablet). Also in 2 R 34, 73 we find *zadu* among words that signify *writing*.

Words derived from 'a writing' *zu* 'skin,' *kunna* 'a reed,' and *dup* 'a tablet,' are the three following which are all explained *dibú* (tablet) in 2 R 49, 64:—(1) (2), (3). The latter, or *zu-dibbu* appears again in 2 R 5 where we find *zudibbi nisi* 'a treatise on men': 'ditto on women' (*nisti*), followed by many more 'treatises' on dogs, oxen, birds, &c. A similar word to *zu-dippi* (skin tablets) is *gi-dippi* (papyrus tablets).

The word *Katu* seems derived from *Kan* (a reed), quasi *Kantu*. In 2 R 32, lines 37 and 40, we read *Katu sha dippi* (papyrus for tablets): *Katu musaru* (papyrus for writing). Then *katu sha dippi* returns again and is repeated seven times, being translated the last time by *suku* which I suppose means 'a reed.'

I return to the word *Kan* 'a reed.' There are two very interesting glosses which stand next to each other in 2 R 34, 51 and 52, and are therefore probably connected. One of

these (line 52) is [illegible] . [illegible] [illegible] *Kan Makkan* "the papyrus of Lower Egypt."

Upper Egypt was called *Milukha*, and Lower Egypt *Makkan*. These words are frequently placed in two consecutive lines showing the correlation between them. See for instance 2 R 46, lines 48, 49, and also lines 77, 78.

The other gloss, in the next line 51, is [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] *rakrak sha libbi kani*, 'membranes from the interior of the reeds.' I consider *rak* to be the Heb. רק which Schindler renders 'membrana: charta subtilis,' a word derived from רק *tenuis*.

Another example is found on the tablet K 221, as follows: [illegible] Reeds; [illegible] green; [illegible] *epar*, the produce; [illegible] *saddi-su*, of his country; [illegible] which; ..... (*words lost*) ..... [illegible] [illegible] [illegible] *ibtiqu su*, they cut them; *ana*, for; [illegible] *timut* baskets(?); [illegible] [illegible] [illegible] *nikilti* 'skilfully made.' I suppose *timut* to be a variant form of *tinut*. The Hebrew טנא 'a basket' occurs twice in Deuteronomy.

The word [illegible] *Kan* 'a reed' occurs in a very remarkable passage, which illustrates in a curious manner a chapter in the Book of Revelations. We read in Rev. xxi that St. John saw the Holy City *New Jerusalem* coming down from Heaven. And the angel who showed it to him "*had* A GOLDEN REED *to measure the City and the gates thereof, and the wall thereof.*" Compare the following lines, which are found in 4 R 6, 37:—

1. A GOLDEN REED—very long. A Reed, very precious:
2. The splendid *passur* OF THE GODS.
3. It was a Reed OF PURE GOLD, whose scale was cunningly divided.

These three lines are the commencement of a piece of poetry, of which I do not understand the further tenour. It may perhaps refer to the construction of the Ark, for we read two or three lines afterwards something about "a

divine command from the messenger of Marduk," and then follows, "*I closed up with bitumen the door of the ship.*" But, whatever the meaning, the passage as far as it goes is very remarkable. I annex a verbal analysis. a golden reed; *galgalla* very long; *gisuk*, a reed; very precious; the *passur;* *illa*, splendid; of the gods.

Kan, the reed; *pazti* of pure gold; *sha*, of which; *salima*, the scale; *taramú* was cunning (or skilful).

The *passur* is often mentioned, and said to be made of gold, but I am unable to affix a definite meaning to the word.

The phrase meaning "the gods" is extremely frequent in the Accadian language; the Assyrian I believe always translates it by *ili* 'gods.'

pazti, "of pure gold," is a most important word. It is the Hebrew פז *Paz* 'aurum purissimum.' Buxtorf says: "פז aurum solidum et purgatum." In the Bible it occurs in several passages.

Salima is the Hebrew סלמ *scala*, which occurs in the story of Jacob's ladder (Gen. xxviii, 12).

Taramú is probably from *Aram* 'cunning' Heb. ערמ, *callidus*. But perhaps it is a verb in the second person; *cujus scalam calles*, 'whose divisions thou dost understand.'

I proceed to notice a few other words which appear to denote books or writing materials.

Karatan (2 R 48, 23) is very like the Latin word *Chartam*. It is rendered 'papyrus book,' and *kissu* 'a volume.' The latter word appears to be the Syriac כשא colligavit; compegit in

fasciculos. The passage is as follows: *Kissu* (alone) is explained 'papyrus book.' *Kissu* (of writings), is explained by (writing).

Kissu (*sha musari*, of writings) is explained by which is merely the plural of (see 2 R 48, 23). I gave an example of this plural in vol. 2 of the Transactions p. 68. 'written sentences' [spread out upon the threshold of the sick man's door], where the Assyrian version has *Masi.*

It will be remembered that we had the word before, in the phrases *kunna* and (2 R 49, 64) both of which appear to mean 'papyrus writing.'

The word *Alal* or *Alalu*, which has been translated "Papyrus," has not yet I believe been referred to any Semitic root. I think it is עלעלה an ancient and reduplicate form of Heb. עלה 'a leaf,' and therefore meaning 'leaves' or a book consisting of leaves collected together. So *folium* in Latin, "foliis ne carmina manda" (*Virgil*), "folium recitare Sibyllæ" (*Juvenal*). And so in Arabic, *paper* is called *urrak*, i.e. 'leaf.'

I have to add that the word *alal* is explained in 2 R 48, 37 by *sikin nari* "the .... of the river," perhaps 'the reed of the river.'

Likhutsi. Mr. Sayce has called attention (p. 344) to the phrase . . *likhusi dippi*, which occurs in a table of Moon portents. I have found the same phrase in 2 R 42, 22, where it is said they were written in the tongues of Assyria, Sumir, and Accad (the name of Assyria being however broken off, except the final letter 'country'). I think that *likhutsi* is the Hebrew לקט *collectio*, which word is used of collected *writings*, *sentences*, &c.

I have shown that [cuneiform] sometimes signifies 'writing.' This will enable us to explain some passages which have hitherto been misunderstood. In Tiglath 8, 36 the king says: "In return for my constant piety, may the gods place my *name* (or my history [cuneiform]) in the book of Ashur, for all future time firmly as a rock!" Again, in 3 R 15, 3 Esarhaddon, on hearing of the death of his father, says: [cuneiform] *uspir*, I wrote (ספר to write) [cuneiform] my letters [saying that I claimed the succession].

A Syllabary recently brought from Nineveh by Mr. G. Smith contains the following, which confirms what has been said: [cuneiform] . [cuneiform] . [cuneiform] showing that [cuneiform] was pronounced *nigin* and *napkharu;* the latter is a *niphal* form of *pakharu*, a volume, list or collection.

§ 3. *On the amount of accuracy now sometimes attainable in Assyrian translation.*

I believe it is now generally acknowledged that the cuneiform inscriptions have been in great measure successfully deciphered, or at any rate that sound principles of translation have been established. But if we look back twenty years or so, we shall find that at that time very great doubts prevailed among scholars, including some names of celebrity in the study of Oriental languages: who could not be induced to bestow a fair examination upon doctrines which they had condemned *à priori*.

If we inquire what has caused the cessation of these doubts in the minds of candid persons open to conviction, but who have not time themselves to study the written tablets of Assyria and Babylonia, the chief cause is doubtless the increased number of translators, and the general agreement which their translations exhibit. For, it would be strange indeed if many persons living in different countries

should fancy that they read in those ancient records long and circumstantial narratives of the exploits of Sargon and Sennacherib: Assurbanipal and Darius, if there were in fact no mention of those monarchs, and if the whole decipherment were but "the baseless fabric of a vision."

The agreement of many translators, if they are really independent, is therefore the simplest and readiest argument that can be employed. The first, or at any rate the most conspicuous example of this was the Version of the long inscription of Tiglath Pileser the first, by four translators, working without any communication with each other, which was published by the Royal Asiatic Society in 1857. The same argument is available at the present day. Although I admit that in obscure and difficult passages, or when the subject-matter is new or unusual, there is much discrepancy between different translators, yet I think that when the subject is easy and the text of the tablet in good preservation there is almost as much concordance as would be found between two translators of a passage in Herodotus.

Of this I propose to offer an instance. In Vol. I of the Transactions p. 108 I gave the translation of a simple and pleasing prayer for the temporal and eternal happiness of the King, which is found in vol. 3 of Rawlinson's British Museum inscriptions plate 66. M. Lenormant in his *Premières Civilisations* p. 177 has recently published a translation of the same prayer. As he does not mention my translation nor allude to it in any way, I presume that he had not seen it. It is upon this supposition (viz. that of the perfect independence of the translations), that I now propose to place them side by side, and then to ask any candid inquirer whether they do not agree as well as any two translations from the Greek would do?

1. Days long:	*Des jours prolongés:*
2. years long lasting:	*des anneés durables:*
3. a sword strong:	*un glaive puissant:*
4. life long:	*une longue durée:*
5. years of glory extended:	*un vaste renom de gloire:*
6. preeminence among kings,	*la préeminence sur les rois.*

7. to the king my lord grant	*au roi notre seigneur, le justicier,*
8. who these things	*qui toutes ces choses*
9. to his gods has given.	*à ses dieux a offert !*
10. Limits vast and wide	*Des frontières larges et vastes*
11. to his empire	*à son empire*
12. and to his rule	[omitted]
13. may he enlarge, and may he complete.	*Qu'il vive ! qu'il soit en paix !*
14. Over all kings, sovereignty	*Au dessus des rois la souveraineté*
15. royalty and empire	*la royauté, et le commandement*
16. exercising, to grey hairs	*en l'exerçant, aux cheveux blancs*
17. and old age may he attain !	*et à la viellesse qu'il parvienne*
18. In addition to the gift of days these	*Et pardessus tout cela*
19. the land of the silver sky, the courts refulgent	*la région qui brille comme l'argent, les autels splendides,*
20. the abode of blessedness	*le bienfait de l'état de bénédiction*
21. in their feasts	*parmi leurs banquets (des dieux)*
22. and the fields delightful	*et les jardins bienheureux*
23. in their light	*dans leur lumière*
24. may he dwell a life	*qu'il les habite, la vie*
25. eternal, holy	..... *joyeuse*
26. in the presence	*dans le voisinage*
27. of the gods	*des dieux*
28. inhabiting Assyria !	*qui habitent l'Assyrie !*

Addendum to the preceding Paper.

On considering again the obscure line in page 437,

Kan pasti sha salima taramu

I find that it is susceptible of a different interpretation.

The person who is speaking says in the next line *Tar sibri sha Marduk anaku*: "I am the (*prophetic*?) son of Marduk."

The speaker of these words can hardly be any other than the god Nebo (or Mercury) who was the son of Marduk. And just as here he holds in his hand a golden reed (or rod), so in Homer Hermes has the epithet χρυσορραπις 'bearing a golden rod.'

He was ψυχοπομπος or ψυχαγωγος 'the leader of departed spirits.' See Homer Odyss. 24, 1,

> Ἑρμης δε ψυχας Κυλληνιος εξεκαλειτο
> Ανδρων μνηστηρων· εχε δε ραβδον μετα χερσιν
> Καλην, χρυσειην . . . .

and the long account that follows of his leading their spirits to the realms of Hades. Also Horace:

> Tu pias lætis animas reponis
> Sedibus, *virgâque* levem coërces
> *Aureâ* turbam.

It will be seen on referring to Liddell and Scott's lexicon that ψυχαγωγειν had also frequently the meaning of raising the spirits of the dead by magic arts or divine power (Plato and Æschylus). Thus in Euripides (Alcestis 1147) where Admetus says "Do I not see a spirit?" and Hercules replies "I am not ψυχαγωγος, (a raiser of departed spirits)."

So Virgil describes Mercury (Æn. iv, 242)

> Tum VIRGAM capit: hâc animas ille EVOCAT ORCO
> Pallentes . . . . . .

These things being duly considered I think that the line in question *Kan pasti sha salima taramu*, may mean "the rod of pure gold which raises departed spirits."

Rama is the Heb. רומ or הרימ 'to raise up' and *Salima* I have shown by several examples in vol. 2 of these Transactions, page 30 and 32, to mean the soul of a deceased person.

I will also quote the following passage from tablet 173 which is written in praise of Ishtar. *khi sha salima tarama, atraru lu* (the rest is broken off).

khi is explained by *kan*, a *reed* (or *rod*) in Mr. Smith's new syllabary S 15 (see No. 68 of my edition of it): and *atraru* or *hatraru* seems evidently the Hebrew חטר *hatra* which is the usual word for *virga* 'a rod,' so that the words seem to imply 'the divine rod which raises the spirits of the departed.' If this explanation is the true one, it connects the Assyrian with the Greek mythology in an interesting manner.

I now think that the words ought to be divided thus:

(*Kan pasti sha*) *salummata* *ramú*

I find that *salumma* means 'a shadow' Heb. צלמ umbra: imago: simulacrum: all which words are frequently used to express the spirits of the departed, the *ειδωλα καμοντων*. The meaning of the line therefore remains as before, "the rod of pure gold which raises departed spirits."

I will give some examples of the word *salumma* 'shadow.' In 2 R plate 49 is a tablet relating to the stars. At line 13 there is mention of a Comet.

as arki su kun kima salummu

After it was a tail like a shadow.

The simile is a rude one, but when a man advances towards the sun his shadow may be said to follow him 'like a tail.'

I will add some other examples. In an ode to the Sun 4 R 25, 42 *salummatu nasi,*

lift up the shadows (or darkness). And in an ode to the god of fire 4 R 26, No. 3, he is called *munammir ikliti* 'enlightener of the darkness,' and [illegible] *sha salummat ramú*, 'he who lifts up the shadows.' And in 4 R 18, 10 we read: *salummatu ramu*, he raises the spirits [from the gate of the Abyss, and sends them to heaven].

צלמ is derived from Heb. צל *umbra* (whence it means also 'protection,' *tutela : præsidium*). This צל is the Assyrian *tsillu* or *sillu*, which is in frequent use: thus in the inscription of Xerxes (Rich, plate 15, line 8), "This house was built under the *shadow* or protection [illegible] *tsilli* of Oromasdes."

The verb *ramu* occurs in a similar sense in the following important passage. *Atta Marduk bil rimnu sha miti bulluda rammu*, 'tu Marduk deus misericordiæ, qui mortuos ad vitam revocas.'

I return to the passage quoted in p. 436 *rakrak sha libbi kani* 'membranes from the interior of the reeds.' Another and more important example of the word is found in 2 R 26, 51 [illegible] *raqraqu* which seems evidently to mean *papyrus* or *membrane*. It is not derived from רק tenuis, as I there said, but from the Heb. ירק 'white' or 'pale green.' This appears manifestly from the cognate words which accompany and explain it in lines 50–55 namely [illegible] *arqu :* [illegible] *araqa :* [illegible] *urriqu :* [illegible] *urak :* and [illegible] *urkitu.* If we compare these with the Arabic word *urak* or *warak* 'paper' the resemblance is manifest.

More words follow, still referring to 'whiteness' and 'paper,' such as [illegible] explained [illegible] *pizú* (white), and [illegible] *buzzū sha gi-dib-zu* 'the white (*i.e.* paper) of a book.' This phrase receives five explanations, one of which is most

remarkable, namely in line 52 where it is explained *Babar*, that is to say, *Paper*, for the Assyrian B and P differ very little. It seems then that the Greeks borrowed the word *Παπυρος* from the Assyrians.

The word just quoted, *buzzu* 'white' may well be compared with the Hebrew בוּץ *butz* or *buz* which Gesenius renders, as a verb, 'albus fuit,' and as a substantive 'byssus.' It is well known that the byssus was exceedingly white.

In page 432 I have suggested that the tablets called *gabri* were those in which the two languages, Accadian and Assyrian, were given in *parallel columns.* I have lately found that Delitzsch (Assyrische Studien, page 3, note) has given the same explanation of the word as meaning *Parallel columnen.* It may therefore be considered as almost certain.

In Mr. Smith's new tablet marked 340 the sign is explained by *pisan*, and *pisannu*, and *alal.*

This is to be added to the former evidence that often signified 'writing.'

ACCOUNT OF RECENT EXCAVATIONS AND DISCOVERIES MADE ON THE SITE OF NINEVEH.

By George Smith.

Read 7th July, 1874.

After the brilliant discoveries of M. Botta, Mr. Layard, and their successors, the subject of Assyrian excavations slumbered for many years.

Meanwhile, from the results of these discoveries, Assyrian scholars were throwing from time to time new and remarkable light, on the history and civilisation of empires long buried and almost forgotten.

By far the most important of the discoveries made on the sites of the cities of Assyria, was that of the Royal Library of the Assyrian kings, a large portion of which was found during the excavations at Kouyunjik, and brought to the British Museum.

At first, after the arrival of these treasures at the British Museum, it was supposed that the inscriptions were nearly complete, and that they would supply a perfect collection of Assyrian literature; but as time passed on, and Sir H. Rawlinson and other scholars gradually published the contents of the tablets, it became apparent that not half of the library was in the British Museum.

This fact becoming known, and great interest being taken in the Deluge Tablets at the time, the Proprietors of the "Daily Telegraph" came forward, and offered one thousand

guineas, to reopen the excavations at Kouyunjik, and recover more of these library tablets.

This liberal offer was accepted by the Trustees of the British Museum, and I received leave of absence to carry out these excavations.

At the close of these explorations, the Trustees of the British Museum determined to continue the work, and the Proprietors of the "Daily Telegraph" having made over to the British Museum the firman and excavating plant, I again started for the east for six months to reopen the excavations. The firman expired in March, and the impediments thrown in my way by the Turkish authorities rendering it inexpedient to continue the work, the excavations were then closed, and I returned to England, bringing with me the smaller antiquities discovered during the expedition.

My purpose this evening is to give some account of the site of Nineveh, and of the excavations and discoveries I made on this spot.

I visited many other sites, and obtained antiquities from some, and I excavated for a month at Nimroud, the site of the Calah of Genesis, but I do not intend entering into an account of these sites from want of time.

It must be understood at starting, that as my commission on both occasions was to excavate on sites already worked, with a view to complete our collections, I could not possibly make such new and startling discoveries as those of Layard, and my excavations must be considered rather, to use the words of Professor Rawlinson, as gleanings in the field which he has already reaped. I should have preferred to go to a new site, as I believe that things of greater importance are to be found at some other places, but the short space of time, and small extent of the expeditions, rendered it more advisable to reopen the old sites, and this course has been amply repaid by the valuable inscriptions and objects obtained. The results of my work at Nineveh will serve to show that in spite of the great discoveries of Layard and his successors, the site of the great Assyrian capital is not exhausted; while there are numerous other important sites either untouched or only slightly worked.

The ruins of Nineveh are situated on the eastern bank of the Tigris opposite to the modern town of Mosul, they consist now of a large enclosure covered with low mounds surrounded by the ruins of a magnificent wall, about eight miles in circuit, and broken on the western side by two great artificial mounds, Kouyunjik or Tel Armush and Nebbi Yunas. Through the middle of the city flows the stream of the Khozr entering through the eastern wall and passing out through the western wall by the southern corner of the mound of Kouyunjik.

The mounds of the wall of Nineveh are said to be in some places even now nearly fifty feet high, while the breadth of the *débris* at the foot is from 100 to 200 feet.

Diodorus states that the walls of Nineveh were 100 feet high, which was probably not beyond the truth; but, as the upper part of the wall is everywhere destroyed, it is impossible to prove the matter at present. The breadth of the wall was probably 50 feet—excavation, however, might determine this with certainty.

The western face of the wall of Nineveh is over 2½ miles long; its faces towards the town of Mosul, and the River Tigris. At the northern and southern corners the river closely approaches the wall, but between the two points the Tigris bends out to the west, making a bow-shaped flat of land about a mile broad between the wall and the river. On the western side with their outer border in a line with the wall lay the two palace mounds called Kouyunjik and Nebbi Yunas, to be described later.

Where the western wall at its northern corner abuts on the Tigris, it is joined by the northern wall, which is about a mile and one-third long. There is a considerable mound in one part of this wall, which marks the site of a tower and of the great northern gate of Nineveh. The entrance which was excavated by Mr. Layard is adorned by colossal winged bulls and mythological figures, and paved with large slabs of limestone; it appears to have been under the centre of the tower which had a depth from front to back of 130 feet. The northern wall is continued from the north-eastern corner by the eastern wall, which is three and one quarter miles

long. Nearly half way along this side, the wall is broken by the stream of the Khozr, which coming from the east passes right through the site of Nineveh and runs into the Tigris. Where the stream of the Khozr breaks through the wall, the floods have destroyed a portion of the defences—enough remains however to show that the lower part of the wall in this part is built of large blocks of stone, probably to resist the water, and in the river itself, in a line with the wall, stand fragmentary blocks of solid masonry, which Captain Jones, who made the best survey of the ruins, considers to be remains of a dam to turn the Khozr into the city ditch. I am rather inclined to think they are part of a bridge over which the wall was carried.

South of the Khozr, where the road to Ervil and Baghdad passes through the eastern wall, stands a double mound, marking the site of the Great Gate of Nineveh, the scene of so many triumphal entries and pageants of the Assyrian kings. As this was the grandest gate in the wall of Nineveh, it would be an important spot to excavate.

Outside the eastern wall, where the city was most exposed, Nineveh was shielded by four walls and three moats, making this side of the fortification exceptionally strong. The eastern and western walls are connected at their southern extremities by the south wall, which is the shortest and least important of the defences of Nineveh, measuring little more than half a mile in length.

The two palace mounds, called Kouyunjik and Nebbi Yunas, are situated on the western side of the city, and at one time joined the wall. Nebbi Yunas is a triangular shaped mound, crowned by a village and burying ground. It is called Nebbi Yunas from the supposed tomb of Jonah, over which a mosque is erected.

Excavations were made here by Mr. Layard, and afterwards by the Turkish Government. The works showed the existence of palaces here, the first built by Vul-nirari B.C. 812, the next by Sennacherib, B.C. 705, who, after finishing his great palace on the Kouyunjik Mound, built a new one here late in his reign. From this building came the fine memorial cylinder, with the account of the expedition against

Hezekiah, King of Judah. The third palace at Nebbi Yunas was built by Esarhaddon, son of Sennacherib, B.C. 681, and from here came three memorial cylinders containing the history of this reign. North of Nebbi Yunas, just above the stream of the Khozr, lies the largest mound, on the site of Nineveh, Kouyunjik.

The whole southern face of the mound, from the north-east to the south-west corner, is bounded by the stream of the Khozr, which has been artificially diverted to flow round it. The mound at one time was surrounded by a casing of large squared stones, and some former excavator had cleared a considerable space of this facing at the northern part of the mound. The Turks have since built a bridge part of the way across the Tigris, and for this purpose, they pulled down and carried away the exposed facing wall of Kouyunjik, and the basement wall of the palace of Assur-bani-pal.

The northern part of the Kouyunjik mound is occupied by the palace of Assur-bani-pal, called the North Palace, and the south-western part by the palace of Sennacherib. Between the two palaces, and on the eastern part of the mound, there exists a wide space of ground, on which no Assyrian building has been discovered. According to the Assyrian inscriptions, there were at least four temples in this space—two temples to Ishtar, the goddess of Nineveh, a temple to Nebo and Merodach, and a ziggurat or temple tower. I determined to search this space in order to discover if any traces existed of these buildings. There were already many trenches from the former excavations, and detached monuments and inscriptions had been found here, including two important obelisks, which were already in the British Museum.

My operations here brought me on traces of a palace entirely ruined, the walls being pulled down and the sculptures and inscriptions broken. One of the bricks bore the inscription "Palace of Shalmaneser, King of Nations, son of Vulnirari, King of Nations also." This inscription is the most ancient palace text from Nineveh, and shows that the city was a capital much earlier than we formerly supposed.

This Shalmaneser, who built the palace at Nineveh, reigned 1,300 years before the Christian era. He was a great conqueror, and subdued the land of Nairi, the region at the head waters of the Tigris. On the same spot I found bricks of the same monarch from an adjoining building, a temple to Ishtar. The inscription reads, "To Beltis his lady, Shalmaneser, viceroy of Assur, King of Nations." A third legend from this spot belongs to the renowned monarch Tugulti-ninip, son of Shalmaneser, the conqueror of Babylonia. This reads, "Tugulti-ninip, King of Nations, son of Shalmaneser, King of Nations also, the temple of Beltis the wife . . . built." In another part of the mound I found an account of the war between this Tugulti-ninip and Nazi-murudas, King of Babylon.

The centre of the mound also produced a broken block of black stone, with part of an inscription of Mutaggil-nusku, a monarch who reigned in the 12th century before Christ.

Memorials were also found of Assur-nazir-pal and Shalmaneser, his son, two celebrated monarchs, who reigned in the 9th century before Christ. These kings made additions both to the palace and temples, and some portions of fine sculptures of their age were found cut to pieces and employed in later buildings.

On the eastern side of the mound I worked at a spot where former excavators had obtained bricks of Sargon, King of Assyria, belonging to the temple of Nebo and Merodach. Some of these turned up as usual, and with them others which came from a palace of Tiglath-Pileser King of Assyria, the monarch who assisted Ahaz, King of Judah, and conquered Rezon of Damascus.

The position of Tiglath-Pileser's palace is well marked. As his inscriptions state. it was at the bend of the River Khozr. So far as my excavations went, the building seemed entirely ruined. Shattered sculptures and inscriptions, and the broken fragments of a winged bull, which must have been more than 20 feet high, were all that could be found. The inscriptions which I discovered belonging to the temple of Nebo and Merodach were of the time of Sargon and Assur-bani-pal.

In the temple area I found two chambers. One of these had plastered walls traced with a simple pattern, one end of the room having a circular recess. In it I only found a bronze lamp for two lights. The other chamber, which was some distance to the east, was square in shape, built of irregular blocks of stone, containing numerous inscriptions of Assur-bani-pal, dedicated to the goddess Ishtar. I doubt if either of these chambers is Assyrian, for the cuneiform inscriptions did not appear to be in their original places.

In the northern palace, built by Assur-bani-pal, I also made some excavations, principally in the southern corner. Here there was a considerable deposit of clay tablets, and from this spot I obtained the majority of the tablets presented by the Proprietors of the "Daily Telegraph" to the British Museum. On reopening these trenches this year, they did not turn out nearly so productive, but among the few I obtained from here there are some of great interest. One of these is an Assyrian copy of an early Babylonian text written in the reign of Assur-bani-pal. This monarch is known to have restored the temple of Bel or Merodach, at Babylon, and I procured from this site a brick of Assur-bani-pal, stating the fact.

On the tablet I found in the north palace, Assur bani-pal has copied and preserved an inscription of a more ancient King of Babylonia who, like him, had restored the temple of Bel.

The name of this new Babylonian monarch was Agu, son of Tassi-gurubar, son of Abi . . . . son of Agu-rabi, son of Ummih-zirriti of the race of Suqamuna. The names of all these monarchs are early in style, and totally different to the names common in the known historic period.

The titles of the monarch are King of Kassu and Akkad, King of Babylonia, King of Padan, and Alman, King of Guti or Goim, and King of the Four Races. The great exploit of Agu was the recovery of the images of Merodach and Zirat-banit, which had been carried to the land of Hani, a place north-east of Babylonia. This remarkable tablet carries us back to a remote age, earlier than the discovered ruins in Babylonia, and yet Agu relates, in his inscription, that he restored the temple of Bel, at Babylon, which already existed

in his time. We must remember that Babylonia had a history and chronology reaching far into the past, and the doubt that now hangs over its early records arises not from any defect in these early inscriptions, but from our ignorance respecting them.

Another tablet from this spot was a perfect bilingual tablet belonging to Assur-bani-pal, King of Assyria. In this the titles of his father, Esarhaddon, are given in full.

There was a ruined entrance to the palace near where this inscription was found; there, buried under heaps of charcoal, stood two bases of columns; one of these I gave to the Turks, and the other I brought to England. The greater part of the north palace has been ruined at an early age, and there are no sculptures there now to rival those in the British Museum.

My principal work was executed on the site of the palace of Sennacherib, called the south-west palace. The search in most cases was for tablets, and these formed here the great bulk of my discoveries. In the great court of Sennacherib's palace, I made several trenches to see if anything had been left in the enclosure. Near the western side, and not far from one of the entrances, I found the lintel of a doorway; it had fallen on the floor of the court, and was broken into two. This lintel is the first yet found in the Assyrian ruins, and is altogether of a remarkable character. It has not belonged to one of the larger entrances, for its length is only six feet.

The ornamentation of the lintel shows two winged dragons looking towards the middle, separated by a vase in the centre of the piece. Over the backs of the dragons there is an ornament of honeysuckles. The figures in this sculpture are lengthened out to suit the shape of the lintel, and boldly and roughly cut, as their position was high above the spectator. In connection with this sculpture I must notice another architectural object in the new collection. It is a small model in fine stone of a human headed bull, similar to those that stand at the entrances of Assyrian buildings. Over the wings of the model the Assyrian artist has carved the base of a column. Now in his restorations of Assyrian buildings,

Mr. Fergusson has placed columns over the backs of the bulls, an arrangement by many considered very doubtful, but which this model shows to be correct in principle. The base of the column on the model of the bull is of the same conventional form and style of ornament as all the other bases found in Assyrian ruins, and the top has a hole for a plug just like the large ones, a specimen of which I have brought to England. The shafts of Assyrian columns were, as a rule, of wood, and the capitals, two of which I found, resemble the Doric and Ionic orders. I have never seen any trace or evidence of capitals with bulls' heads, like the early Persian ones. I reopened the grand entrance of the palace of Sennacherib, which was excavated by Layard. I was in search of foundation records, but found none, the pavement being broken and the place pillaged. With reference to this entrance I can correct a prevalent impression. It has been supposed that all the Assyrian winged bulls have five legs, and I have seen a published picture of the entrance of Sennacherib's palace with each of the bulls having five legs; so far as this entrance is concerned, this is imagination, these bulls only have four, although at other sites they have five.

In the northern part of Sennacherib's palace I found a fragment of a curious cylinder belonging to one of the last kings of Assyria, a successor of Assur-bani-pal, who bore the name Bel-zikir-iskun. The records of this monarch have unfortunately been broken and scattered; they appear to have originally come from the temple area, which is not well examined.

Over what may be called the library space of the palace of Sennacherib, I made a large excavation, and cleared away the top rubbish over a space about 700 feet round; but my time was so limited that I could not reach the floor in the whole of the space, and I had to contract my operations in order to finish within the period of the firman. It was necessary here to remove all the top earth over the places which required excavating, for the whole space had been tunnelled in Mr. Layard's excavations, and there was not sufficient support for any new tunnels.

In all the chambers where I searched I found clusters of fragments of tablets and cylinders on the pavements, and for some distance above the floor fragments were thinly scattered, the place having evidently been disturbed at some early period, probably in search of treasure. In one or two places there was nearly thirty feet of earth over the lowest fragments, which were below the general level of the floor.

I recovered from the palace of Sennacherib over 2,000 tablets and fragments of Cuneiform inscriptions of various ages, the earliest being of the time of Assur-risilim, King of Assyria, 1,150 years before the Christian era, and the latest belonging to Assur-bani-pal, the Sardinapalus of the Greeks, in the 7th century B.C.

It is only a few days since the collection arrived at the British Museum, and I have not had time to estimate the contents of the inscriptions; I will, therefore, this evening choose a few prominent representative fragments for description, and give some account of them, as types of the collection.

Commencing with the historical inscriptions, which are the most interesting, I will notice a fragment of the synchronous history of Assyria and Babylonia. Translations of this document have already appeared in the Transactions of the Society, so a short description of it will suffice. The copy in the Museum was discovered and published some years ago by Sir Henry Rawlinson; it describes the wars, treaties, and other transactions between the kingdoms of Babylonia and Assyria during several centuries, and is a most important document in relation to the history of those countries. In spite of some smaller fragments which have since been found, there still remained some parts of the history which were wanting. One of these parts lay between the time of Bel-nirari, B.C. 1370, and Bel-kudur-uzur, B.C. 1250. It was well known that within this period occurred the conquest of Babylonia by Tugulti-ninip, King of Assyria, an event which marked one of the great epochs in the history of the country. One of the fragments from the palace of Sennacherib is the upper corner of the second column of the

synchronous tablet, with the account of this conquest. All the lines of the new fragment are mutilated, but the most important parts are preserved, and some of the lost parts can be restored. I gave an account of this fragment in the "Athenæum"; since that I have had it cleaned, and some of the words come out clearer. The King of Babylon at this time bore the name Nazi-murudas; he was of the race of monarchs called Arabian by Berosus; he engaged in war with Tugulti-ninip, King of Assyria, and was defeated at a city in northern Babylonia named Kar-istar-agarsal; after this the Babylonians submitted to Tugulti-ninip, who established a Semitic race of kings at Babylon. The new empire of Tugulti-ninip is said to have reached the city of Pilazki to a place the name of which is lost, and Arman-agarsal on the Tigris, to Kullar in the land of Zamua (the Persian mountains). There is a fragment of the next reign which appears to state that the son of Bel-kudur-uzur, King of Assyria, was King at Babylon. This monarch killed his father in battle, and twice invaded Assyria. The reverse of the new fragment of synchronous history contains the end of the account of the expedition of Shalmaneser II to Babylon, and shows that this document also contained the record of the Babylonian wars of his son Samsi-vul III.

I must next notice some fragments relating to the history of Egypt and Assyria in the 8th and 7th centuries, before the Christian era. The oldest of these I have already noticed in the "Daily Telegraph": it relates to the revolt stirred up by Pharaoh, King of Egypt, in Philistia, Judah, Edom, and Moab, B.C. 711, which revolt was suppressed by Sargon, King of Assyria. In an earlier part of his annals Sargon mentions an Egyptian ruler named Sibahe, who has been hitherto supposed to be the Sabaco of Herodotus, but on one of the new fragments we have the Egyptian royal name Sabaku, the exact equivalent of Sabaco. The annals of Assur-bani-pal relate that on the death of Tirhakah, he was succeeded by Urdamane, who is called the son of his sister. Two of the new copies give us the variant statement, that Urdamane was son of Sabaku. This enables us

to fix, in conjunction with the Egyptian inscriptions, the following succession and relationship of the Ethiopian Kings of Egypt:—

Sabaku, the Sabaco of Herodotus.

Sabatuk, his successor, of whom no particulars are known.

Tarqu, or Tirhakah, brother of the wife of Sabaku.

Urdamane, son of Sabaku, and the sister of Tarqu.

The following new facts in the history of Tirhakah and Urdamane, are from fragments of tablets and cylinders in the new collection. I relate them as they took place, without pointing out the particular fragments.

During the reign of Esarhaddon, Tirhakah, King of Ethiopia, led Bahal, King of Tyre, to throw off the Assyrian yoke, and form an alliance with himself. To punish this rebellion, Esarhaddon marched against Palestine, and laid siege to Tyre, in his tenth expedition, about the year 672, before Christ. Leaving part of his army before Tyre, he marched from Aphek in Lebanon, along the coast of Palestine to Raphia, in the south-west corner of Palestine. Esarhaddon tells us that between Aphik and Raphia was a distance of 30 kaspu, that is about 200 miles. Here the assistance of the King of Arabia was secured to convey water for the army, as the boundary river of Egypt was dry. The Assyrian monarch describes the distances marched by his army, the nature of the country, and the suffering of his soldiers by thirst. The object of the expedition of Esarhaddon was Miluhha or Miruhha, probably Meroe, the stronghold of Tirhakah. The mutilation of the record prevents us ascertaining if he reached it; but we know from other sources that he conquered Egypt up to Thebes, and annexed it to Assyria. From this time there was war between the Assyrians and Tirhakah for the possession of Egypt, until the latter fled before the forces of Assur-bani-pal, left the country, and died. Tirhakah was succeeded in Ethiopia by his nephew Urdamane, who appears to correspond with the Nud-mi-ammon of the Egyptian texts. Urdamane continued the war with Assyria, and took and fortified the cities of Niha (Thebes), the No of the Bible,

and Unu (Hermopolis). The Assyrians then with their adherents collected in Memphis, which city was besieged and captured by Urdamane.

In the next expedition by Assur-bani-pal to recover Egypt from Urdamane, we gain some new details, including the weight of the two obelisks which the monarch removed from Thebes as trophies to Nineveh. There is also in the new collection a perfect copy of the account of Gyges, King of Lydia, and Psammitichus of Egypt.

Passing from the historical fragments, I will give a short notice of some additions to the curious myths current in Assyria. For this purpose I choose two—the history of the Seven Evil Spirits and the Izdubar legends. The Assyrians believed that all natural phenomena were the work of spirits, and diseases, misfortunes, and calamities were caused by evil spirits, of whom they counted several classes. In the Assyrian system it was the especial work of the god Hea and his son Merodach to check and reverse the work of these demons.

The history of the Seven Evil Spirits is written on a large clay tablet, part of which is in the old Museum collection; another considerable portion has now turned up in Sennacherib's palace.

The story of these evil spirits is as follows :—

In the first days there existed evil gods and rebellious spirits in the lower regions of heaven, and they were the authors of misfortune. There were seven of these spirits, who were the messengers of the vengeance of Anu, the supreme god of heaven, the third one was in the shape of a leopard, the seventh one was the maker of the tempest; all the others had distinguishing characteristics, but the list is mutilated. These seven spirits were let loose on the earth; they went from city to city, holding the wind and travelling on the tempest, causing darkness on a clear day; they had with them the tempest of Vul, god of the atmosphere ; they came in the west like the lightning, and went down to trouble the rivers.

In all the heaven of Anu the king they set up evil, and there was none to resist them.

At that time the god Bel heard of their doings and weighed the matter in his mind. He took council over these things with Hea, who was the great sage among the gods. Considering that Anu did not govern heaven, which was his division of the universe, properly, and did not keep the wicked spirits in order, Bel, who ruled the earth, and Hea, who ruled the sea, resolved on intervention, and they placed Sin, the moon-god, Shamas, the sun-god, and Ishtar or Venus, three children of Bel, in the lower part of heaven to rule it, and they established them with Anu in the government of the whole of the celestial regions, and Bel supported them day and night, and urged them to be united.

When the seven evil spirits in their wanderings came to the lower regions of heaven and saw the new rulers, they came fiercely round the moon-god to attack him, and the noble Shamas, brother of the Moon, and Vul, the god of the atmosphere, son of Anu, they persuaded to come over to their side, while Ishtar, sister of the moon-god, joined King Anu, sat with him on his throne, and shared his empire. Sin, the moon-god, was now abandoned and hardly pressed by his enemies; while meditating new mischief, the seven evil messengers of Anu, uncontrolled by the Moon, swept down from the midst of heaven to earth.

Bel, seeing the trouble of his son Sin, called to himself his attendant god, Nusku, and directed him to go to Hea, who dwelt in the deep, and inform him of the trouble that had happened to Sin. Nusku departed, and arriving at the sea, told the message of his lord to Hea. Hea on hearing of the breakdown of his plans, was very angry, and calling to him his son Merodach, described to him the conduct of the seven spirits who came like a tempest on the world and fought against Sin, the son of Bel, and he directed him to go to his assistance.

The rest of this curious myth has not yet been discovered, but there is sufficient to show the character of the story.

There are several fragments giving new additions to the Izdubar legends; these belong principally to the story of Ishtar, the story of the missions of Zaidu, the son of Izdubar, and the Deluge tablet. My comparison of these fragments is

not sufficiently advanced for me to give any translations now, but I can point out a few of the results.

Of Izdubar himself, the hero of these legends, I have now clearer ideas, and I am confirmed in my first suggestion that Izdubar is the same as the Nimrod of the Bible. The question of the identity of Nimrod has lately attracted some attention, and has been discussed in the Society's Journal. The widely different opinions formed on the subject serve to show its difficulty. I believe myself that the passage about Nimrod in Genesis is historical, and is to be understood in its natural sense. The hero whom I provisionally name Izdubar, corresponds in period, character, and exploits with Nimrod; and when we find the phonetic reading of his name I believe this identity will be proved.

In the new collection there is the opening of a fine table, with a prayer to the hero, Izdubar, who has the titles usually given to Nergal, the god of hunting and war. Izdubar is called *buvalu*, "the giant," the equivalent of the title *gabber*, given in Genesis to Nimrod; he is also called *buvalu emuki* "the giant in might," or "mighty giant." The account of Izdubar in the inscriptions is that he was a giant, a subduer of great animals in the times after the Flood, and he acquired the sovereignty of Babylonia, one of his capitals being Uruk or Erech.

The Bible represents Nimrod as a mighty one or giant, a hunter who obtained the dominion of Babylonia, and mentions four of his cities, one of them being Erech. The stories of Izdubar correspond also with some ancient traditions respecting Nimrod, and from the form of prayer to him, which I have noticed, he appears to have been deified after his death. I have also found his name on a second tablet, which is part of a series on witchcraft; he is there supposed to watch over the country.

Numerous fragments of the new collection refer to the astrology and astronomy of the Assyrians; one interesting fragment is part of an Assyrian astrolabe. The Assyrian astrology and astronomy is the same as the Babylonian, and came originally from that country. However fanciful and incorrect many points in their system may be, we must

always remember that it was the foundation of the astronomical science of later nations, even including our own.

The astrolabe, of which we have now a portion, was circular in form, divided in its circumference into twelve parts, corresponding to the twelve months of the year and the twelve signs of the zodiac. The sign of each month is placed in its division, with the name and figure of the prominent star in that sign of the zodiac. Each division or sign of the zodiac is considered to consist of 20 degrees, but these degrees may only be for astrological purposes, as the signs of the zodiac had astronomically 30 degrees. Within the outer circle a second circle is drawn, half the size of the other, representing a circle of the heavens nearer the pole, divided again into twelve parts containing each the name of a typical star. The inner divisions are stated to be each of 10 degrees.

On the back of the astrolabe are lists of stars, and apparently directions for use. This astrolabe is the type on which later instruments of the kind were formed, and I saw in the East an old Arabic one of the same shape divided also into twelve parts, with the signs of the zodiac round it.

In the division of tablets relating to commercial and private matters, there are many specimens, including dated contracts, letters, &c. Among these I choose to notice a corn tablet; it is a perfect and beautiful specimen, conical in shape, impressed with seals, a cuneiform legend, and a Phœnician docket. At the base of the tablet there is a hole, through which the string passed, which was fastened to the mouth of the sack containing the corn. The Assyrian inscription on the tablet states that it relates to thirty omers of barley sent by Nabu-duri to Tebetai, a charioteer of the city of Maganizi, and the Phœnician docket corresponds, giving us the phonetic reading שער, *sheor* for the cuneiform signs for barley. There are also several fragments of a longer Phœnician text, but I have not yet examined them.

I cannot pass from the Assyrian tablets without mentioning a useful class of inscriptions, the syllabaries, instruction tablets, bilingual tablets, and lists, many of which are in the new collection. Most of these tablets had their origin

from the fact that the cuneiform system of writing was the invention of a race having a Turanian language, totally different to the Semitic language of the Assyrians and Babylonians. The Semitic race, coming into the country at a later period, borrowed from the earlier race its science and literature, and it was necessary to prepare comparative syllabaries, grammars, vocabularies, and similar tablets to enable the Semitic people to understand and translate the older works. The syllabaries give the sound and meaning of the various cuneiform characters in the Turanian, and the equivalent words in Semitic. The cuneiform signs were written in a column down the centre, and the Turanian equivalents were placed on the left hand, while the corresponding Semitic ones were arranged on the right. One of the explanatory tablets in the new collection is most valuable as it gives the explanations and phonetic readings of some of the complicated geographical names found in the cuneiform inscriptions; the list includes the explanation of the names of Erech, Ur, Nineveh and other capitals.

The document is divided into four columns; the first containing the Turanian phonetic readings, the second column the monograms of the cities; the third having the explanations, and the fourth the Semitic names.

Most of these tablets are very dry and without interest except for the knowledge they give. In some cases, however, the labour of learning is lightened by tablets with short sentences and translations.

Most of the fragments of cuneiform tablets which I have described will join on to other portions of the texts already in the Museum, and thus the new inscriptions will be to a great extent absorbed into the old collection, but very much more requires to be done in this direction before the cuneiform texts will be complete.

Beside the cuneiform tablets, there is a considerable collection of miscellaneous objects, some of which I have described. Among the stone objects there is the shoulder of a colossal statue and fragments of an obelisk, both with cuneiform inscriptions. These objects have been broken up in early times, like most of the larger antiquities at

Kouyunjik—in fact one of the most striking facts at this ruin is the amount of destruction that has taken place.

Among other things I must notice a curious bronze fork with two prongs, and a bronze style with which the cuneiform characters have been inscribed. There are many other metal objects, including a cuneiform inscription on lead and an iron dish.

The class of terra-cottas is represented by some very curious portions of ornamental vases, lamps, and figures of Roman time, and pottery of all ages.

There is only a small collection of glass, but it contains some beautiful specimens, particularly a Roman bottle with two faces. In the palace of Sennacherib I found numerous fragments of a beautiful crystal ornament which had been broken up; there is also a portion of a fine crystal cup with the name of Sennacherib upon it in cuneiform characters.

The seals and impressions of seals are numerous, and some of them very curious; among these is the royal seal of Sargon, King of Assyria, with his name and date.

I have dwelt in my paper rather on the particulars of the collection which I discovered and not on my personal experience in the East. The account of my journeys I have reserved for the "Daily Telegraph," and it is my intention afterwards to publish in a permanent form an account of my excavations and the collections I have procured. For this work I shall reserve complete translations of the deluge series and other interesting inscriptions.

I cannot close without pointing out some of the work which ought to be done and on the site of Nineveh.

1st. The great library in the palace of Sennacherib ought to be completely excavated and all its treasures recovered, I calculate that there must be 20,000 fragments of cuneiform tablets still buried there, and it would require three years' work and the expenditure of £5,000 to complete the excavation.

Considering the remarkable interest ot the inscriptions which have already been found there, it seems most important that this work should be completed and the whole library obtained.

2nd. The centre and eastern portion of the mound of Kouyunjik requires to be further investigated. The relics here are of an earlier age than those from the palaces of Sennacherib and Assur-bani-pal, and will throw light on the more ancient period of Assyrian history.

3rd. There should be as complete an examination as possible of the mound of Nebbi Yunas.

4th. The ruins of the wall and body of the city should be investigated.

5th. Examination should be made round the wall for Assyrian tombs, particularly for Royal tombs, as with reference to them we are at present totally ignorant of Assyrian customs.

These suggestions only refer to the site of Nineveh, while there are numerous other sites in the country which would also repay excavation.

My explorations in the East have now closed, and the subject of Assyrian excavations will probably again slumber for some time; but as the public take a wider interest in these studies, and in the remarkable monuments which abound in the Valley of the Euphrates and Tigris, I hope that at a future day excavations may be reopened, and some of the objects I have in view may then be accomplished.

THE LANGUAGES OF THE CUNEIFORM INSCRIPTIONS OF ELAM AND MEDIA.

By the Rev. A. H. Sayce, M.A.

Read 3rd November, 1874.

One of the first points that attracted notice at the beginning of cuneatic decipherment was the revelation of a language belonging to the Turanian or Ural-Altaic group. In all the Akhæmenian inscriptions the place of honour next to the Persian legend was given to an agglutinative idiom, and this agglutinative idiom sometimes appeared *alone*, without any Persian transcript. Naturally, it excited some interest among scholars; but, with the exception of Westergaard, Mordtmann, and, above all, Norris (in the Journal of the Royal Asiatic Society, XV, 1, 1853), no very special attention has hitherto been paid to it. The reasons of this comparative neglect are obvious enough. Beyond the Akhæmenian epigraphs, little, if anything, remains of this particular language; and the agglutinative character of what we have renders it peculiarly difficult to determine the meanings of any new words we may meet with when they are untranslated by the Persian; while the supremely valuable Assyrian records have absorbed the chief care and study of scholars. The second Akhæmenian idiom, however, deserves further investigation. It was but one out of many dialects spoken over the mountainous country to the south-west of the Caspian. It was closely allied to the languages of the powerful monarchy of Elam, and more distantly to those of the primitive population of Babylonia,—the inventors of the cuneiform system of writing,—who had descended into Chaldea from the highlands to the east of the Euphrates. The principal dialect spoken by the latter was the Accadian, in which the brick-legends of the earliest kings are inscribed, and of which we possess grammars, dictionaries, and reading

books with Assyrian translations annexed. I shall say but little of the Accadian here, beyond pointing out its extreme importance as being what may be called the Sanskrit of the Turanian family, and consequently the future starting-point of Turanian philology, and mentioning that its nearest kindred are to be found in the Vogul[-Mordvinian] division of the Ugrian group, which it exhibits in the most primitive and transparent form. But besides the Accadian and an allied Babylonian idiom, which chiefly differed from Accadian by preferring *m* to *b*, *ma* to *ba* ("ille"), &c., we have fragments of at least *three Susianian dialects*, more or less related to the second Akhæmenian. These are the languages of the inscriptions copied by Mr. Layard at Mal-Amir, of the Cassi or Kossæans, who conquered Chaldæa under Khammuragas, and established a dynasty there which lasted to the 13th century B.C., and above all, of the Susians, or Susianians proper, who had their seat at Shushan.

The only writer, so far as I know, who has as yet worked at these languages, is M. Fr. Lenormant. He has not only published all the Susian inscriptions at present known in Europe,[1] but has also, in his admirable work on "La Magie chez les Chaldéens" (pp. 315-326), done much towards the elucidation of them. The aim of the present paper will be to extend these researches in as brief a form as possible, and to lay the foundation of future investigations into a subject so fruitful and interesting to the Turanian and general philologist.

It is not difficult to settle who were the speakers of the second Akhæmenian language. Its prominent position, the care taken of it by the engraver, the occurrence of inscriptions in it unaccompanied by Persian or Greek texts, all show that it must have been the vernacular of the lower classes who inhabited the country in which the monuments of the Persian kings were erected—in other words, of the Medes. This conclusion is confirmed by various indications in the inscriptions themselves. While Ormazd is explained to be "the god of the Aryans" (*annap Arriyanam*, Beh. Col. III, 77, 79), Rhagæ, the old Median capital, and Autiyârâ, a canton on the frontier of Armenia and Media, which

[1] In his Choix de Textes Cunéiformes, Pt. 2, 1874.

are described in the Persian version as provinces of Media and Armenia, are simply named, without any further description, in the second Akhæmenian (Beh. II, 13; III, 1). It is clear, therefore, that the bulk of the population of Media was Turanian, the aristocracy alone, along with a few ruling tribes, belonging to the Aryan conquerors, of whom only we have, until lately, heard. The mixture of the two populations serves to explain, as M. Lenormant has pointed out, the engrafting of Turanian spirit-worship under the forms of the *Fravashis*, or fetichistic spirits, upon the pure theology of Aryan Zoroastrianism. The very name of Media is best explained by the Accadian *mada*, "*the* country" *par excellence*, and might well be applied to a land which was thought to be the cradle of the Turanian race. The Accadian word has close analogies throughout the Ugrian group; and we can thus understand how Berosus could term the dynasty founded at an early date at Babylon *Median*. At the same time, the name itself, as a geographical or national title, does not seem to have become known before the 9th century B.C., and to have been confined to a particular part of the population. The Assyrians first became acquainted with the Medes, or *Amada'ai*, as they called them, in the reign of Shalmaneser III (B.C. 840), when they lived far to the East,[1] the Parśuas, or Parthians (not Persians), intervening between them and Assyria. It is not till the age of Rimmon-nirari, about 790 B.C., that they had advanced into the country known as Madia Rhagiana to the classical geographers; and many indications lead me to think that it was not the Turanian natives but the Aryan emigrants who are really meant. At any rate, it was the latter who are designated Medes by the classical writers; and on this account, while fully allowing with the French school that the language of the second Akhæmenian texts belonged to the aborigines of Media, I prefer to call it Elamite, as less likely to lead to ambiguity and misconception.

It is possible, indeed, that the most correct designation of the language would be Amardian. Susiania is always called Khapirti or Khalpirti in the texts, and this distinct and special title given to a country whose name appears as Uwaja in the

[1] Lenormant, Lettres Assyriologiques, I, p. 26.

Persian, and *Elamu* "the highlands" in the Babylonian version, might seem to imply that the texts themselves were addressed to a population which included itself under the same appellation. Elamu, however, is but a translation of the old Accadian name of Susiana, *Numma*—a word connected with the Vogul *numan* "high," and *khapirti* may have a similar meaning in the second Akhæmenian, like *bar* in Accadian. On the other hand the "Apharsathchites" and "Apharsites" are mentioned separately in Ezra iv, 9, by the side of the Susanchites and Elamites, and Strabo (xi, 13; 3, 6) states, on the authority of Nearkhos, that "four bandit nations" inhabited the mountainous region eastward of the Euphrates, the Amardians or Mardians who bordered on the Persians, the Uxians and Elymeans on the frontiers of Persia and Susa, and the Kossæans contiguous to the Medes.

In the Cuneiform Inscriptions of Western Asia, Vol. II, 50, 51, Khubur is given as a synonyme of Śubarti or Elātu ("the highlands"), and the inscriptions of Mal-Amir, which we are about to consider, call the persons commemorated in them Aipir-irra or Amardian. Mal-Amir and Behistun being in the same part of the country, it would follow that the readers for whom the second Akhæmenian text was intended were the first of Strabo's four tribes; and as they were the representatives of the rest of the Turanian subjects of Darius, the name which properly belonged to them alone was extended to the whole of Susiana. A similar extension meets us in the Persian title of Susiania, *Uwaja*, "the aborigines,"[1] being clearly the Uxii of Strabo, and the Khuzistan of the modern Arabs.[2]

It would be out of place here to go over the ground already trodden by Norris and others, and to subject the second Akhæmenian texts to a new examination. We may take the results already obtained, and see in these Elamite or Amardian inscriptions a language which bears a close relation, both grammatically and lexically, to the Finnic division of the Ugrian branch. The conjugation of the verb shows the same semi-inflectional character, although, as we shall see,

[1] According to Mordtmann, however, from خوز "sugar reed."

[2] Lenormant, La Magie, &c., p. 319.

the Accadian will enable us to analyse it into its original form. All I shall do here is to give a revised list of the powers of the Elamite characters, which can now be determined by means of the Assyrian Syllabary.

The numbers attached are those of Norris (Journal Royal Asiatic Society, XV, 1, pp. 47–49):—

1. kha.
2. i.
3. u.
4. e.
5. ba.
6. bat *and* be.
7. ip.
8. pi.
9. pu.
10. bar.
11. pir.
12. ban.
13. ap.
14. khal.
15. rad (?).
16. pa.
17. ka.
18. kav.
19. gi.
20. ci.
21. cu.
22. kan.
23. kur.
24. car.
25. kas.
26. ak.
27. ik.
28. uk.
29. az.
30. anin.
31. khub.
32. da.
33. ti.
34. tu.
35. tak.
36. tur.
37. tas *and* ur (?).
38. ut.
39. di.
40. dip.
41. du.
42. dar.
43. at.
44. mir(?).
45. am.
46. śa.
47. tu.
48. a.
49. hu.
50. ideograph of "ship."

51. ma.
52. mi.
53. mu.
54. man.
55. mar.
56. mas.
57. maś.
58. (i)m.
59. ukh.
60. ideograph of "month."
61. na.
62. nu.
63. ni.
64. nab.
65. an.
66. in.
67. un.
68. sal.
69. kak (?) *or* ruv.
70. rud.
71. rakh *and* rah
72. ri.
73. ru.
74. rab.
75. rak.
76. ras.
77. khir.
78. ir.
79. ta.
80. il *or* lum
81. la.
82. al.
83. ul.
84. sa.
85. se.
86. su.
87. sin.
88. śir.
89. as.
90. is.
91. za.
92. si.
93. śu.
94. mes.
95. es.
96. cit *and* ge.[1]
97. ga.
98. ya.
99. khu.
100. khi.
101. ideograph of "man."
102. zig.
103. tin.

[1] M. Lenormant makes this *śi*. Etymologically, the reading *siya* for *citya* "to see" is to be preferred, but I do not see how such a transliteration can be defended on palæographical grounds.

The forms of the characters prove that the syllabary was derived from Babylonia, and not from Assyria like the Armenian; and when we consider the close resemblance of the Susian to the archaic Babylonian of Accad, and the independent though parallel development to the later Babylonian which it has undergone in the Elamite texts, we arrive at the result, that while the Susian syllabary was borrowed from Chaldæa at an early epoch, the Elamite was a further modification of it. The modernness of this modification leads us to believe that the culture of the Amardian tribes was a late growth; and this conclusion is confirmed by our finding most of the terms expressive of civilised political life taken from the Persian. Thus *siyatis* "power," is the Persian *siyâtis; dadim* "law," the P. *dâta; pirrahmadarahim* "sovereignty," the P. *framâtar; saksabamana* "governor of a province," the P. *khshathrapâwa; dāyānis* "district," the P. *dahyaûs; baruzanaim* "multilingual," and *misbazana* "omnilingual," the P. *paruzana* and *viçpazana; nuyakka* "grandfather," the P. *nyâka; dakārahim* "palace," the P. *taśara; isdana* "monument, the P. *çtana; khabadana* "temple," the P. *apadâna* (Lenormant, Lettres Assyriologiques, i, p. 18). We cannot add to this list, however, *dippi* "a tablet," as Mr. Norris believed, in spite of its curious resemblance to the Persian *dipi* and Sanskrit *lipi*, since the word *dip* "an engraved tablet" is one common among the Accadians from the earliest times, and borrowed from them by the Assyrians under the form *duppu*. *Dikh* was another form of the Accadian word, and Professor Max Müller has pointed out to me that whereas the Elamite *dippi* is an "engraved inscription," the Aryan root is used only in the sense of "smearing" with ink. Such verbal coincidences turn up all the world over, and it is not more wonderful that these Turanian and Aryan vocables should assume the same appearance than that *whole* and *ὅλος* should mean the same in English and Greek. The verb *rilu*, used in the second Ahkæmenian in the sense of "writing," is purely Ugrian, as the Magyár *iro* shows.

Indeed, the art of inscribing was known to the Amardian populations at a period earlier than the Akhæmenian, as is made clear by two rock inscriptions copied by Mr. Layard at

Shikafti Salman and Kul Faraún, at Mal-Amir (Lay. Inscr., 31-32, 36-37). These inscriptions are of the highest interest, as they are the only ones of any length which we possess besides those of the Persian epoch; and it is much to be wished that we had better copies of them. Until accurate copies have been made, indeed, any connected translation is out of the question. The dialect, however, is the same as that of the second Akhæmenian, with a few unimportant variations; and the forms of the characters presuppose an older age. As the inscriptions have not before been examined, it would be well to go somewhat into detail. They seem to have been engraved by order of Sutur-Cit, the son of Khanni-Cit the Amardian (36, 10; 32, 20), "the constituted king" (*anin khuttac*[1]), and dedicated to the gods Dipti and Tirutur. The second element in the royal names is the Sun-god, who was called Cit in Cassite, as we shall see hereafter. *Sutur* is but a form of *Sutruk*, a common element in the names of the Susian monarchs, and probably means "worshipper." *Khanni* must be connected with *khanic* "princely" (Accadian, *khan*), which occurs as a title in 31, 4, and 7. Throughout the inscriptions, *Khapir* is written *Aipir*[2]; an Amardian is *Aipir-irra;* "the gods of the Amardians," *annappi* ⊢ *Aipir-ip-na* (36, 18); and "the aforesaid Amardian," *Aipir khuyan* (36, 14). The loss of the guttural aspirate is to be noted here. The same uncertainty about the initial aspirate meets us in Accadian, where the precative may be marked by *ga*, *kha* and simple *a*, as well as in the second Akhæmenian texts where we have *khu* as well as *hu* for the first personal pronoun. The latter, by the way, is *hu* in these Mal-Amir legends, as well as in the Susian; and since the gutturalised form is only met with in the Artaxerxes inscription, its occurrence would seem to be a mark of lateness. The names of the two deities, Dipti and Tiru-tur, remind us of *dippi* "a tablet," and *tiri* "to speak"; and they seem, therefore, to have been gods of literature. In 36, 1, they are said to be *annapir . . . khir śuncip-ri* "the gods who rule him," where we have a combination of the plural, such as we get in

[1] [illegible]. [2] [illegible].

sinn-ip "they came," with the third personal pronoun which meet us in *nan-ri* "he said"; *es-ri* "he was" and "they were"; and *addi-ri* "his father." The pronoun takes the form it often has in Elamite. *Esri* occurs in the second line of the same inscription, joined with *sisni-r* "magnificent," in reference to a word *cidic*, which I would connect with the Accadian *cuda* and the Elamite *citya* "to see" and *cit-ip* "palace." It clearly signifies "an image" or "work" of some kind; and the same passage gives us not only *cidic* but also the plural *cidicci-mes*[1] "images," and *cidic-ni-na* "of his image." It will be noticed that the plural affix *mes* "many," requires a short vowel to precede it, with a consequent accentuation of the last syllable of a word. Sometimes the affix itself may be omitted; and so we read (36, 18) *a'ak annappi* ⟝ *Aipir-ip-na* "and the gods of the Amardians." In other cases the affix may form a collective noun: thus in 36, 17, we have ⟝ *a-mes pi-ri-in* "the river Pirin," from *a* "water." Where this river may have been is as little known as the situation of the "country of Khiti" or "Khidi" or "of the Khiticians" (*Khitic-inni*) (31, 10; 36, 11; 16). The simple theme may be united with *irra* "every individual," as in *annapp-irra-na* "of all the gods" (literally "of every god") (31, 11, 18, 19); and the latter word is not unfrequently shortened to *ir* as in Elamite. Thus we have (36, 4; 8, 20) *annapir khupak-ir* as well as *annapir khupak-irra* "all the chief gods." *Khupa-k* occurs as *khupa* in the Elamite texts; but, as we shall see when we come to speak of the Susian inscriptions, a final guttural was used to change a substantive into an adjective or *nomen agentis.* More especially it gave a passive or neuter force to a root, as in Magyár; and in Elamite we sometimes have the full form *ka* (*e.g.*, *rabba-ka* "chained"). So we get *khuttak* "made" or "constituted," from *khut*, in the Elamite and Susian legends as well as at Mal-Amir (36, 10, &c.); and in the latter inscriptions, Sutur-Cit is called "the proclaimed son" (*sak inra-k*) of Khanni-Cit. The ideograph of "king" (𒀭𒀭𒀭𒆠𒆠) used in these inscriptions, as well as in the Elamite

[1] 𒆠𒀭𒀭𒀭 𒁹𒁹𒁹 𒁹𒁹𒁹 𒆠𒀭𒀭𒀭 𒁹𒁹𒁹.

texts, was pronounced *issep* (W.A.I. II, 33, 31) in Accadian. The Susian inscriptions, however, show that the Susianian value of the character was *anin* which may possibly be represented by the Mal-Amir *aiin* (36, 5).

Among the nouns in the Mal-Amir inscriptions which we can identify with those found in the Elamite texts are *batin* "a district" (31, 9), connected, perhaps, with the Accadian *bat* "a fortress"; *anman*, *naman-mes* "race" (37, 21, 10), and *anman-na* "by race" (36, 6); *dina* "law" (32, 21, 36, 12, 23); *ulkhi*[1] "house" or "family" (36, 8); *ea* "house" (Elamite, *eva*) (31, 22, 24); *śunci* "kingdom"; and *piruri* "all" or "collected" (32, 8), a frequent word in Susian, and found in Elamite in the plural participle *pirru-ir-sa-irra-ibba* "assembling." The post-positions *na* or *inni* "of," and *icci* "in," are not uncommon. Among the pronouns we may detect *hu* "I"; *mi*, "mine" (in *bukhu-mi-na*, 31, 7), *khir* or *ir* "him," *apin* (37, 20) and *apini* (32. 28) "them," *khu* and *khi* "this," "that"; *a'ah*[2] (36, 3), "this here," answering to the *ayāhe* of the Antaxerxes inscription, *akka* (32, 28, 23, 31) "he who," and *ri* "his" or "him." *Ri* is the possessive third personal pronoun which might be attached to nouns or participles, and was frequently suffixed to certain nouns of relationship, like *addi-ri* "his father," and *sak-ri* or *sakarr* by the side of *sak* "son." It is plainly connected with *khir* or *ir*. *Khupirri*, which the Elamite uses for the nominative of the third personal pronoun, seems to be *khupa* "chief" with *ri* postfixed, though the first part of the word may be identical with the Mal-Amir *khubah* (36. 8; 17, 20), which answers to the Elamite *khube* "that."

The Elamite verb has been so fully treated by Mr. Norris that I will confine myself to signalising the forms in *-ri* and *-ip*, which I have quoted above. Just as in Turkish *dogur-lar* is at once "strikers" and "they strike," so *śuncip* "they ruled" is properly "rulers," and *bebtip* "they rebelled," literally "rebels." This plural in *-ib* (or *-be* after a consonant) meets us again in Susian, and when we compare the Elamite *ab* and the Accadian *ib* and *ba* or *bi* "he," "they," and

[1] . [2] .

remember that the latter when used as a suffix forms nouns like *anna-b* "god," *khili-b* "deity," just as *ri* besides *ab* does in Susianian, we are led to the belief that this pronoun may have been the origin of the plural affix. The ordinary third person singular and plural of the past tense of transitive verbs in *-s* (*turnas* "knew," *marris* "took," &c.) can hardly be separated from the plural suffix *mes* "many." In Accadian, while the third person plural of the present is formed by the plural suffix *ene*, the third person plural of the past is made by *mes*, which sometimes loses its initial *m*. Analogy would appear to have extended what was properly the mark of the third person of the plural to denote the third person of the singular. Perhaps the similarity of the ending of the second person singular (*-nti*), where we clearly discover *ni* "thou," and of the first person plural (*-kut*, *-hut*, *-ut*) may have the same explanation.

The kings commemorated at Mal-Amir entitle themselves monarchs "of peoples and of Anzan" (*śulra-irra a'ak anzana*, 36, 12; 32, 8, 18), and thus prove their substantial identity with the royal scribes of Susa, whose common title is "lord of the empire of Anzan." Anzan was properly that part of Elam which bordered upon the Persian Gulf; but the dynasty which established itself in Susa caused it to become the common name of the whole country. The word is found in the ancient astrological tablets of Babylonia, where the second character is one that ordinarily has the value of *du* and the signification of "going." One of its powers, however, was *sa;* and a gloss (W.A.I. II, 47, 18) tells us that *Anduan*, which is translated *Elamtuv*, ought to be pronounced *Ansan*. It would seem, therefore, that *sa* or *za* meant "to go" in the old language of Susiania. The imperial title of the earlier rulers of Elam was "king of Yavutbal." Thus, Nitakh-Enśu calls his father Cudur-Mabug "lord of Yavutbal," and the word is clearly the same as "Yatbur of Elam" of which Sargon speaks (Botta, 66, 27, 87, 1), *l* and *r* being interchanged, as in Lagamal and Lagamar, and *u* taking the place of *a*.

This difference of vowel, indeed, seems to have distinguished the northern from the southern dialects of Susiania

The language of the Cassi or Kossæans, so far as we know it, was characterised by having *a* where Susian or southern Susianian had *u*. So, too, the *Khupur* of the south becomes *Khapir* and *Aipir* in the north. The Cassi once conquered; Babylonia under a leader named Khammuragas, and established a dynasty there, which lasted until Tiglath-Adar overthrew it circa B.C. 1300. A short fragment (W.A.I. 65, 2) gives us the Assyrian renderings of the names of some of the Cassite princes; and we are thus enabled to see that the Cassite vocabulary agreed on the one side with Elamite, and on the other with Susian. *Cadar*, the Susian *Cudur*, is explained "servant"; *ulam* is "offspring" (Ass. *lidanu*), in which we may perhaps see the same root as in the Elamite *ulkhi* "family" and *ilmannu* "at home"; *nimgiragas* is "the arranger," akin, it would seem, to the Elamite *nuisgis* "protect," the Susian *nigas* and *nagi*, and the numerous nouns of agents which terminate in a sibilant remind us of the third persons of the Elamite verb. But the Cassite dialect also preserved a good many vocables, which re-appear in Accadian, but seem to have dropped into disuse in the other idioms. Thus, *meli* is "man," Acc. *mulu*, giving us possibly the true pronunciation of the Elamite character No. 101; *khali* is "great," Acc. *gal* or *gula*, a word which we also meet with at Susa; *cit* is the "sun," as in Accadian; and M. Lenormant may be right in regarding *ragas* as meaning "to beget," the Acc. *rak*. Other words of this dialect are less easy to compare: *burna* "law," *nazi* "prince," and the names of divinities, *Kharbat* or *Murbat*, whom the Assyrians identified with Bel, *Sibarru* the Assyrian *Simaliya* (where the interchange of *b* and *m*, and of *r* and *l* has to be noticed), *Sumu* the Assyrian *Sukamuna*, *Buryas*, *Dunyas*, and *Sipak* called *Śapak* at Susa.[1] Here we find a Susianian *a* represented by a Cassite *i*, which renders it more easy to understand *Aipir* by the side of *Khapir*. The name of Ammi-dicaga, again, the successor of Khammuragas, seems to contain that of the Susian god Umman.

Even at Susa, however, Umman might also be pronounced Amman, when compounded with a word in which the *a*-vowel

[1] Smith's Assur-bani-pal, p. 228.

preponderated. Thus a valuable list of the Susian deities given by Assur-bani-pal includes Amman-caśimas. This list comprises both gods and godesses, and we are thus tempted to infer that Carsa and Cirsa-mas, whose names follow one after the other, were male and female. *Mas* and *immas* formed collectives and abstracts in Elamite, and the transition from the idea of an abstract to the idea of a female divinity is a very simple one. Another god was *Aipak-śina*, which we can hardly refrain from comparing with *khupak* "chief," when we remember the change of *Khupur* to *Aipir*. Susa, in the days of Assur-bani-pal, was the capital of a powerful sovereignty which had absorbed the various tribes of Susiana, and there would be nothing surprising in the gods of these tribes with their local names being gathered together in one common pantheon.

Before passing on to a description of the language, it would be well to give a list of the divinities of the Susians. Besides those already mentioned, we are told that, in the sack of the city, the soldiers of Assur-bani-pal carried off the images of Susinak, "the god of their oracle" (*piristi*), whose statue was concealed from vulgar sight, Sumudu, Lagamar or Lagamal (whose name enters into that of the Biblical Chedor-Laomer), Particira, Uduran, Ṛagiba, Śungurśara, Sudunu, Bilala, Panintimri, Śilagarā, Napśā, Nabirtu and Cindacarbu; and to these we must add Laguda of Cisik Nakhkhunte, Khumba or Khumbume, and Armannu of Sushan, who is said to go "to Dilvun, to the passage (of the sea)" (W.A.I. 60, 9). Armannu seems to be the proper but secret title of Susinak "the Susian (god)."

The phonology of the Susian, as might be expected in a civilised language, seems to be distinguished by a greater avoidance of the guttural aspirate than is the case with the Elamite. While the objective case of the first personal pronoun might be *khun* as well as *hun* in the latter idiom, we find only *hun* in Susian. I have already spoken of its preference for the vowel *u*, as well as of the interchange of *l* and *r* or *b* and *m* or *v*; but attention must be drawn to the frequent loss of a dental between two vowels. Thus the royal

[1] Smith's Assur-bani-pal, p. 29.

name *Khulludus* is often written *Khullus*, and the same peculiarity is met with in Cassite where *Cara* appears by the side of *Cadar*. The two most prominent modern examples of this dropping of the dental are Armenian and Basque, more especially in the Laburdin dialect, where *bauzu*, for example, stands for *baduzu*, *aïtu* for *aditu*.

The plural is formed, as in Elamite, by *mas* or *mes* and *me*, as well as *ib* (*e.g.*, *śuncib*, Lenormant 37, 3; *śunci-mas* 37, 5), and the idea of the genitive is denoted by the postposition *na*. It may, however, be expressed by simple juxta-position, as in Accadian, the governed word following that which governs. But, unlike Accadian, the adjective precedes its substantive, differing herein from the usage of Elamite. Adjectives are formed from substantives by the suffix *ak*, like *libak* "strong"; and *nomina agentis* by the suffix *ik*, as *śuncic* "sovereign," from *śunci:* the two forms, however, have the same origin, and *śunkuk* in Elamite is "empire" taken in an abstract sense. Adjectives, too, in the latter dialect, may terminate in *ici*, like *kharici* "faithful," and M. Lenormant is doubtless right in tracing this suffix back to the Accadian *ga* "holding," which is used to form adjectives. This is confirmed by the fact that the addition of *ka* serves to make gentilic names like *Susunka* a "Susian" from *Susun*. The first personal pronoun is the same as in Elamite, *hu* "I" and *hun* "me" (Len. 38, 1). The conjugation of the verb appears to agree with the Elamite, the 1st person singular of the past tense of transitive verbs ending in *-ah* or *-ih* (this being represented by *-e* at Mal-Amir), and the passive participle ending in *ak* like the adjective. *Mas* or *immas* is used to form abstracts and collectives, *im* being merely the lengthening for accentual purposes of the final short vowel which we have in *annappi-r* and the original identity of the word with *mes* "many," the plura lsign, is clear. Thus the long inscription of Sutruk-Nakhkhunte speaks of *bukrir-mas*, as well as *bukrir-mes*, *bukrir* being apparently the name of some work of art which appears as *bekra* at Mal-Amir (36, 2.). The numeral preceded the noun; thus 2655 pieces of these *bukrir* are mentioned (Len. 32, 32), and another inscription (Len. 43) speaks of 30 and 23 manehs (*mana*) of certain objects, as well as the employ-

ment of 480 and 258 bricks. The termination in *r*, it will be observed, is plentiful: *irra*, however, is unknown, and perhaps, therefore, the *r* in words like *bukrir* has the same origin as the Accadian suffix *ra* or *r*. The possessive pronoun *ri* is also wanting; as at Mal-Amir, "son" is *sak*, not *sakri*. This word, by the way, must be compared with the Elamite verb *saga-hut* "we are descended" and the Cassite *saga* "offspring" in the royal name Saga-saltiyas.

The following translations will give some idea of the character of the Susian language:—

LEN.[1] 35.

1. vâ D.P. Cu - tir D.P. Nakh - khu - un - te sa - ak D.P. Su - ut - ru - uk D.P. Nakh - khu - un - te

The palace of Cudur - Nakhkhunte the son of Sutruk - Nakhkhunte

2. . . . . li - ba - ak kha - ni - ic an - in Su - si - na - ak gi - ig śu - un - ci - ic

. . . . . *the strong, the princely, king of the Susians, the powerful sovereign*

3. An - za - an su - su - un - ka {eri / te} - va D.P. La - ga - bar - ri mas - mi si - ir - ma - na sa - ra - ah

of Elam, the Susian, the servant of Lagamar. For the future (?) *a foundation I founded*

4. . . . . ir - ma - khi a'ac cu - si - h - e anin Su - si - na - ac - na pir - hu - ri khu - ut - ta - ac

. . . . . (?) *and I built. King of the Susians all* (*of them*) *constituted*

5. [li - im -] li - cu - mes 40 sa - ma - nu te - la - ak - ni - na

provinces (?) 40 *in number* (?) *have been given me* (?)

[1] Choix des Textes Cunéiformes, pl. 35.

LEN. 31.

1. hu D.P. Su - ut - ru - uk D.P. Nakh - khu - un - ti - sa - ak D.P Khal - lu - du - us an - in Su - si - na - ac

I Sutruk - Nakhkhunti, son of Khalludus, king of the Susians

2. gi - ig śu - un - ci - ic An - za - an Su - su - un - ka e - ri zu - ib us ti - bu - khi

the powerful sovereign of Elam, the Susian, the servant (?) . . . . . .

3. a - ak khi - ya - an an - in Su - si - na - ak - na pir - u - ri - mas a - kha - an

and the same king of the Susians all (*of them*) *here*

4. kha - li - h pa - bar khu - ut - in kha - li - ik hu - mas an - in Su - si - na - ak -

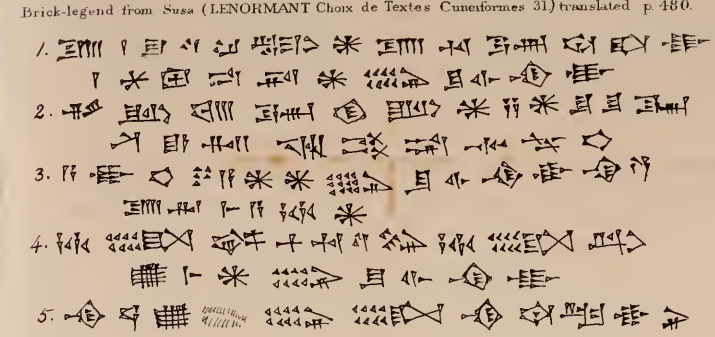
am great . . . . . become great am I (?), *king of the Susians*

5. - na pir - u - [ri] in - li - na te - la - ac - ni

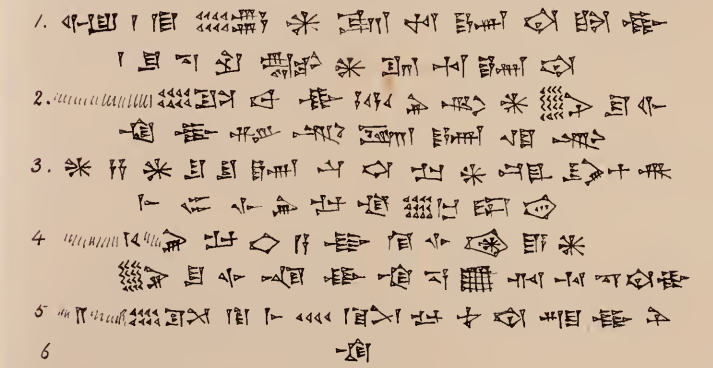
all (*of them*) ; *empire* (?) *has been given me* (?)

Until more inscriptions have been brought to Europe, our knowledge of the Susian vocabulary must remain scanty. Here and there we can pick out a word which occurs in exactly the same form in the Elamite texts, but such instances are necessarily few. Thus, *murun* "earth" is found in Len. 32, 27 ; and in the same line the king (Sutruk Nakhkhunte) calls himself "the builder of Susan" (*cus Susun*). Elsewhere we have *khuśśi* "large" (42, 8), *kha'izzi* in Elamite, *urbubbakkara* "all" (32, 7, 16) like the Elamite *varbib-da*, or perhaps the Mal-Amir *tabubab* (36, 4), and *ta*, "great," the local Susian value of the ideograph which denotes that idea. Mr. Norris notices that Assurbanipal in giving the names of the cities destroyed by him in Susiania, speaks of Dur-Amnani beside Dur - Amnani - ma, of Dur-

Brick-legend from Susa (LENORMANT Choix de Textes Cunéiformes 31) translated p. 480.



Brick legend from Susa (LENORMANT Choix de Textes Cunéiformes 35) translated p. 479.



undaśi beside Dur-undaśi-ma, of Kabima beside Kabima-ma; and he conjectures that *ma* may have meant "upper" or "lower," "great" or "little." It seems to me, however, more probable that *ma* is a shortened form of *mas*, as *me* is of *mes*, and that it has merely a collective force in these city-names, so that Dur-Amnani-ma would signify the villages dependent on Dur-Amnani.

All that now remains is to compare these agglutinative languages of Susiania with the Accadian of ancient Chaldæa, Here, also, I have been preceded by M. Lenormant; and a glance at his tables of Susian and Elamite words, compared with similar Accadian ones, will convince the reader of the connection between the languages. I need not repeat his lists, although many more instances might be added to them, such as the plural affixes *me* and *mes* "multitude" and "many" (from *me* + *es*, "heap") in Accadian, where they both also occur as signs of the plural, *a* "water" (the same in Accadian), or *esrit* "bank," *usar* in Accadian. These coincidences in the vocabulary cannot be explained on the hypothesis of borrowing, since they extend in too many cases to the objects of common life, while the distant and barbarous Cassi, for example, could not have borrowed a word like *meli* "man" from the Accadian *mulu*, since they did not come into contact with Chaldea until Accadian had long been supplanted by Semitic. Moreover, a comparison of the grammar fully bears out the evidence of the vocabulary. Although the Accadian shows us the grammar of agglutinative speech in a singularly primitive form, the machinery of the verb being as simple as it still is in the Tungusic dialects and incorporating the pronouns like Basque and the Vogul-Mordvinian idioms, yet it is at bottom identical with that of the Susianian languages. These have approached a state of semi-inflection, or rather what looks like semi-inflection, as nearly as the modern Finnic idioms; but the Accadian enables us to trace without difficulty the origin and beginnings of this.

I have already spoken of the Elamite third person in *-s*, which is explained by the Accadian where the plural affix *mes* has passed through *ves* into simple *s*, *in-śunnu-s* "they gave," for instance, being exactly parallel to the Elamite *emidu-s*

"(they) deprived." The shortened demonstrative pronoun (*b* for *bi*) which sometimes forms nouns in Accadian, such as *annab* "god," reappears in Elamite substantives like *annap* "god," by the side of *anna* and *an*. As M. Lenormant has already remarked, the *ka* or *k* of the Susianian passive participle and adjective goes back to the Accadian adjectival *ga*, and the affix *ir* or *irra*, which in certain cases has the force of a reciprocal pronoun, is the Accadian *ra* which makes the reciprocal and co-operative forms of the verb. We may add that the same affix forms the first person of the Elamite perfect, and, in conjunction with *man* or *van* denotes the future, but it may in this case be derived from the postposition *ra*, though this has ultimately the same origin as the verbal *ra*. The Elamite past gerund in *raska* may be decomposed into *ra* + *ves* + *ka*. *Da*, which forms the third person of the perfect in Elamite (as in *appa addada khuttais-da* "whatever my father has done"), seems to go back to *da*, a common individualising affix in Accadian, which may explain the Elamite *adda-da* "my father," and *marri-da* "all" by the side of *marribib-da*, or *khube-da* "that" by the side of *khube*. "The indefinite" affix *di* (as Norris calls it) has the same origin, *i* being weakened from *a* as in *Cutir* by the side of *Cadar*. The passive past termination which we find in the Elamite *tiri-van* "called" and *tiri-van-ium* "we are called" and the Susian *khut-in* "become," and which reappears in the Elamite singular *khutti-van-ra* and plural *khutti-in-iun-uba* "about to make," may be compared with what M. Lenormant terms the fifth form of the Accadian verb in *mun*, just as *ra* characterises the third form. In the Elamite future, *van* becomes simple *an* or *in* before *ra*, as in *tid-in-ra* "(he who) shall lie"; *batur-an-ra* "(he who) shall peruse." The first person singular of the past tense of transitive verbs in Elamite, *a* or *aya*, *i* or *iya*, *u* or *uwa* (and *e* at Mal-Amir), which become *ah*, *ih*, and *uh*, in Susian, goes back to the characteristic of the present tense of the Accadian verb. As we have seen, the Susianian third person represents the characteristic suffix of the third person (plural) of the Accadian preterite, the initial pronoun being dropped; and I would explain the first person by the charac-

teristic suffix of the Accadian present, *a*, *i*, or *u*, according to the vowel of the root, the initial pronoun being again omitted. Very frequently, however, the pronoun is prefixed, as in Accadian (*e.g.*, *hukhutta* "I made," *hu-rilu-rah* "I have written"), but what had originally been merely the mark of a tense came in time to express by itself the force of the first person singular. The incorporation of the objective pronoun, which is so prominent a characteristic of Accadian as of Basque, Mordvinian and Vogul, has become very rare in Susianian, though we meet with instances of it, like *hu-ap-tiri-rah* "I have told them."

The superficial resemblances of the pronouns in Susian and Accadian are not striking, and it requires a little examination to bring them out. The possessive of the first person *mi*, recalls the Accadian *mu*, and *adda-da* "my father" may contain the same pronoun which is found in the Accadian *da-b*, but the normal form of the first personal pronoun *khun* in Susianian has no corresponding pronoun in the tongue of Accad. The analogies of the second personal pronoun *ni* are, again, not forthcoming in Accadian, except in *nemen* "vos." It is otherwise with the third person. Here the Elamite *ab* or *ap* answers to the Accadian *ab* (*abba*) or *ib*, *khir* "him" may recall the Accadian *gar* when we remember that initial *g* in Accadian may become *kh* and even *h* and actually corresponds with a Cassite *kh*; while even the possessive *ri* may be reduced to the Accadian *ni*. We find *irti* taking the place of *inti* in the termination of the second person of the Elamite verb, and this shows the possibility of *n* passing into *r* in that language. *Khu* and *khi* go with the Accadian demonstratives *khu* and *gan* (the original of *khu*); the relative *appa* is the Accadian *aba*, and the demonstrative suffix *da* is common to the old idiom of Chaldea.

M. Lenormant has already drawn attention to the fact that both languages possessed a kind of labio-dental intermediate between *m* and *v*; and we may add the tendency in each to soften *kh* into *h*, to allow *m* or *v* to pass into *b* or *p*, and to affect a guttural nasal, *śunkuk* for instance being once written *śunuk*, just as the Accadian *ng* (developed out of a primitive *m*) is represented in Hebrew by נ.

The relationship between the postpositions is very striking. M. Lenormant has instanced the genitive *na* and the locative *icci* or *icca* (Accad. *cu*), and he points out that the Accadian *ma* "country" and *már* "path" explain the origin of the Elamite postpositions *ma* "in," *khati-va* "among," and *mar* "from" (Mordvinian *maro*). So the plural and collective *mes*, *mas*, or (*i*)*mmas* is the Accadian *mes* "many," the plural affix; and even the plural *ib* or *be* may be related to the third personal pronoun, just as the Accadian plural suffix *ene* seems to be a shortened form of *nene* "they." The affix *ir*, *irra* has already been discussed, and although postposition is the general rule in Elamite, M. Lenormant points out exceptions like the augmentative *pir* (as in *pir-satanika*, from *satanika*, Acc. *sud* "extended"), or the localising *it* (as in *it-kat* "place" by the side of *kata*). *It*, by the way, is used in the same manner in Accadian. I have already stated that pronominal preposition, as well as incorporation, occurs in the verbs. The Elamite adjective follows its substantive as in Accadian, differing here both from Susian and from the usual practice of modern Turanian speech. But in both Elamite and Susian, as well as in Accadian, the genitive-relation may be expressed by simple position; though whereas in this case the Susian and Accadian genitive follows the substantive which governs it, the reverse holds good in Elamite. Susian, therefore, may be regarded as standing in a nearer relation to Accadian than does Elamite; and this is not to be wondered at, when we consider its greater geographical proximity and higher level of culture.

The invention of writing and the development of an early civilisation seem to have stereotyped Accadian at a much less advanced stage than that at which the dialects of Susiania had arrived when they first come before us. But even Accadian has had a long past behind it, and shows traces of phonetic decay. The participial affix *a* has lost its final nasal, the particle *a'an* appears to have come from the demonstrative *gan*, and the plural ending of the aorist in *-s* is all that is left of the plural affix *mes*, which is itself a compound of *me* "multitude" and *is* "a heap." But the interval between the languages of Accad and Susiania is not so

great as it seems at first sight to be; and when we turn to the most highly developed modern members of the Turanian family we find them differing but little from the Susianian idioms. And this resemblance is not formal only; in spite of distance in time, in space, and in social relations, even the lexicon is surprisingly alike. Here, then, is a sure basis afforded for researches into the Turanian group, from which similar results may be expected to those which a scientific comparison of the Aryan group has elicited; while the fixed and permanent nature of Turanian grammar, which has remained true to its agglutinative character throughout, despite much that looks like inflection, gives an unmistakeable contradiction to the theory which would evolve the phenomena of flection out of a preceding agglutinative stage.

INSCRIPTION OF HAREMHEBI ON A STATUE AT TURIN.

By Samuel Birch, LL.D.

Read 1st December, 1874.

The inscription of which it is here proposed to give some account, is one that has for some time been known to Egyptologists, although it has not to my knowledge been published. It occurs on the back of a black granite group of two seated statues in the Museum of Turin, and an impression in paper was made of it by Mr. Bonomi on the occasion of his visit to Italy last year, and from it the accompanying drawing has been made. The group and purport of the inscription have been several times described and once figured, but the text of the inscription has not yet been published, as already mentioned. The group was originally nearly nine feet high, and represented the monarch Haremhebi or Horus[1] seated on his throne, holding a sceptre of life in his left hand, and a sceptre in his right hand, which is raised against his breast. The female figure is evidently a queen, for it wears on the head the vulture attire, emblem of a queen mother, and above a cylindrical headdress or modius of uraei, and above that were formerly the two plumes of the goddess Athor, a common characteristic of goddesses and royal persons.[2] She places her left hand on the shoulder of the king in mark of affection. There were originally three inscriptions, one on each side of the throne, and one behind. That on the side of the king has disappeared. Of the other, at the side of the queen, 19

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[1] Rosellini, M.R., no liv. quinquies A. gives the figures. See also Gazzera, Descrizione d. Museo. R. d. Torino, pp. 45, 46.

[2] The vulture indicated Mut "mother," but it is not quite sure that all queens were mothers, though generally so. Many queens have no such diadem. The king was lord of the vulture and uræus, that is, lord of the two diadems, which represented Nishem of the upper, and Uat or Buto of the lower country.

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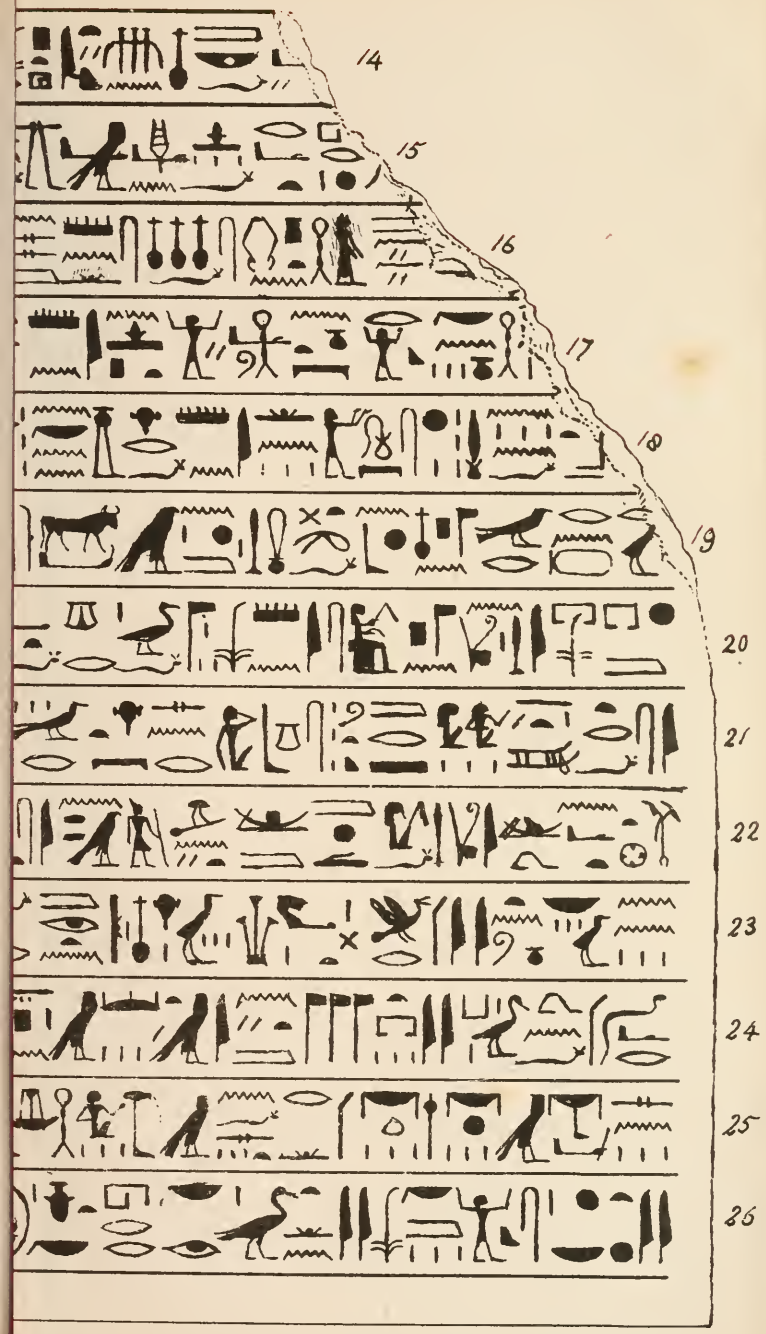
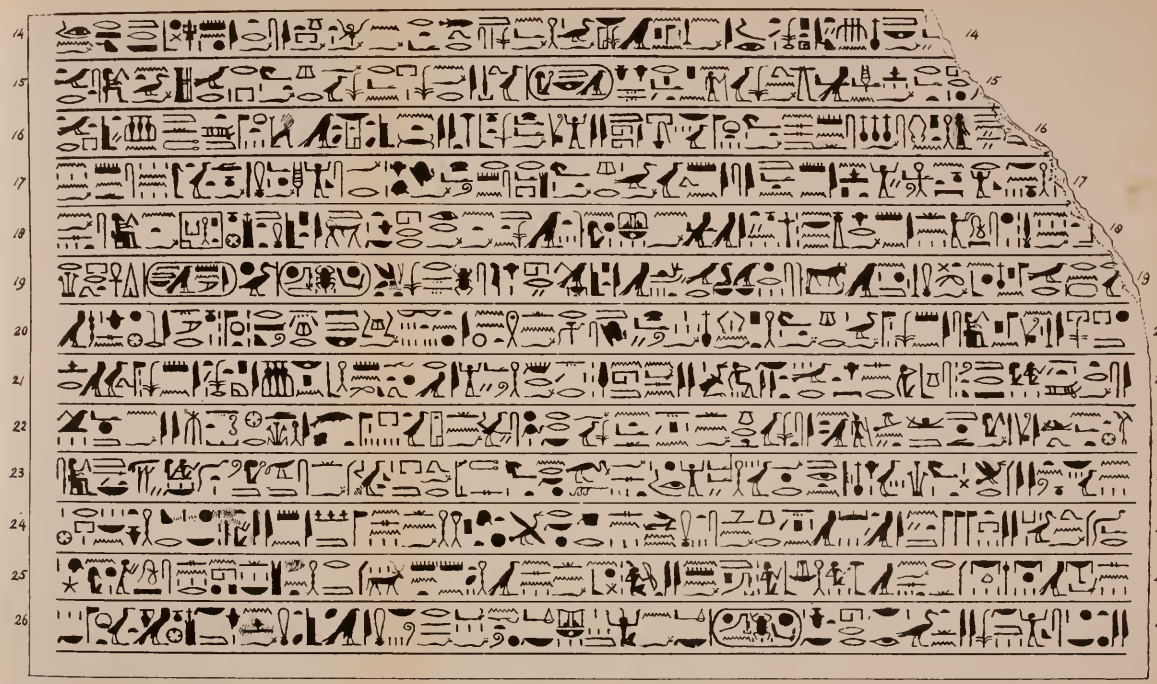


1874 Joseph Bonomi Del.



1874 Joseph Bonomi Del

hieroglyphs were alone visible, but amongst them are the name of the royal lady *Mutnetem*, or Netemmut, called the "gracious mother" or "pleasing mother." At the side of the throne, where the queen is seated, she is represented as a sphinx, and is the only female one found on all the monuments of Egypt. The scene behind the throne apparently represented the king kneeling in adoration to one of the principal deities of Egypt, probably Amen Ra. To this god, indeed, in his various types, Horus showed the greatest homage and deference. He is represented of smaller proportions, standing at the side of a throne, on which Amen Ra[1] is seated, and he stands also of smaller proportions at the side of the god Khem on a monument of the British Museum.[2] It was in fact to Horus that the revival of the worship of Amen Ra, and the abolition of the heresy of the worship of the disk, was due. The inscription at the back consists of 26 lines, and there was apparently about 40 more hieroglyphs at the commencement of the first, which contained the date of the erection of the statue, which was supposed by Champollion[3] to have been due to a decree of the priests to place the statue of Horus and Mutnetem in one of the temples, probably of Karnak, and the text appears to refer to the coronation of Horus. After the praises of the monarch, Horus is supposed to compare the queen to Sati, Nishem, Buto, Isis and Nephthys, and to institute great honours to Horus, and to inaugurate the placing of other statues in the different temples of Egypt. In fact it has been called the prelude of the Rosetta Stone. The queen is supposed to be the daughter and successor of her father Haremhebi or Horus, and it is with her that the XVIIIth dynasty is supposed to end.[4] It is this statue that has given rise to the hypothesis that the queen is the daughter of Horus, for in the 15th line is mentioned "his noble daughter," supposed to refer to this queen. The succession of the dynasty, however, after the fall of the usurper

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[1] Champollion Figeæc, L'Égypte, Pl. 85, p. 320.

[2] Egypt. Galleries, No. 5: Birch, Gallery of Antiquities, Pl. 36, No. 152.

[3] Champollion, Lettres écrites, 1824, p. 48 etc.

[4] This idea was started by Champollion, Lettres écrites, p. 48, and followed by other writers. Rosellini, Monumenti Storici, tom. iii, pt. i, 241, p. 291, hesitates between "daughter" or "wife." Lepsius gives "wife."

Ai, is not very clear, for although Ai figures in the court of the heretical Khuenaten as a priest and leading person of the period, on his elevation to the throne he appears to have reinstated the worship of Amen Ra, or at least conformed to it. There is one remarkable fact, that the princes of Ethiopia, Hui and Amenhetp, who acted as viceroys in the reign of Amenophis III, also held the same posts in that of the monarch Tutanχamen, which renders it possible either that Tutanχamen succeeded Amenophis III, or that the heretical monarchs never obtained the jurisdiction over the south. Although conquests of Horus over the "natives of Kush" are mentioned in the inscriptions of Silsilis, no Ethiopian prince of his reign is known, but Horus showed his aversion of the heretical worship of the disk by demolishing their Theban monuments, and applying the materials, with their faces reversed and placed inwards, for the elevation of his pylon or triumphal gateway at the south side of Karnak. At Luxor he also built a grand portico with enormous columns, in honour of Amen Ra, in his type of Khnum or the demiurgos, and made a dromos or alley of ram-headed sphinxes. It will be observed that Horus was one of the monarchs most devoted to the worship of Amen, yet the inscription does not scruple to mention, in the 20th line, "that the circuit of the *aten*" or solar disk "was handed over to him," showing that the name of the disk was not forbidden to be mentioned although its cultus had been overthrown.[1] It is probable that Horus had come to the crown when quite a lad, for he is mentioned as [2] *au f em hun nen sarut f*, "He was a boy, he had not grown up."[3] This fact seems to render it doubtful if Horus was not descended from some female who had the hereditary right to the crown, and if Mutnetem may not be his mother, for her association as equal to the king, and

[1] Orcurti, Monumenti del R. Museo di Torino, 8vo. Torino, 1852, p. 59, 60; Gazzera, Descrizione, p. 46–51. Rosellini I, p. 240, iii, 271–290.

[2] This word *sart* recurs line 11. This will be commented on in the text, p. 474, n. 2.

[3] Or without intelligence, not arrived at man's estate. See Brugsch, Wörtb., s. 1263. A person intelligent or eloquent. The root *rut* means grown, determined.

her appearance as a sphinx shows that she enjoyed the right of sovereignty in her own person. If she was the daughter of Horus she might of course have been associated with him in the empire in default of male issue, but these equal rights were more often shared by mothers and sisters than by daughters, nor will it be observed is any queen or wife of Horus known on the monuments. It will be also seen from the seventh line, that the declarations of the monarch gave satisfaction to the party of the restoration, but unfortunately no information is afforded of the manner in which the heretics at the close of the XVIIIth Dynasty fell, nor is there any allusion to the immediate predecessor of the king. In the 10th line the usual submissions or embassies of the Ninebows or foreigners of the North and South are mentioned. In the 12th line there seems to be an allusion to his elevation of heir-apparent, for it states "passed by these the eldest or preferred son of Horus in the gate of heaven as prince of that land like him—*i.e.*, Horus—for that noble god made him Horus lord of the palace; it pleased his heart to set up his son on his throne for ever!" It appears from line 13 that Horus was *bes*, 'proclaimed' or 'exhibited' as king in the Temple of Amen. And this seems from the subsequent lines to have taken place on the occasion of one of the great festivals in honour of Amen Ra at Thebes.[1] It is on the 15th line that a singular piece of historical information is conveyed: "He led them to that chief, the heir-apparent dwelling in the two lands Haremhebi; he went to the royal palace; he placed him before him at the home of his very noble[2] daughter." It appears that she too subsequently participated in the ceremonies on the occasion, for "she laid the offerings before the gods of the altar, who rejoiced at the coronation of the king." The gods are subsequently mentioned, and in the following paragraphs is their speech, and not that of the priests on the occasion of his coronation. For it must here

[1] Southern Apet.

[2] It is usual to read as *šeps* in the sense of noble, but *šeps* occurs as *šeps*, Lepsius, Denkm. iv, 70 d., apparently in the sense of lawful or legitimate.

be remarked that such expressions as giving to the king "the festivals of the Sun," "and the years of Horus," are more appropriate to a discourse of the gods than to the declarations of the priests, who could have possessed no such power. It is a proof that the three principal cities of Egypt remained the same, for the power or will of the king is said to have prevailed in Thebes, Heliopolis, and Memphis. It is on this that he received the full royal titles. The king, it also states, repaired the temples, which no doubt had been overthrown by the disk worshippers; after which follows the unusual expression "the body of Ateh and Kenus." The first has been recognised, a city of the Northern nomes, and in Takans the nome of Nubia. The gods also state that the king "made all their forms" or "*akhem*," each before and behind beautiful and true, for he made things at which the Sun rejoiced when he saw them, what of former time was defaced," a marked expression . *kam* Subsequently it is stated that "he sought (line 24) the cities, in which the gods were in the places of this land, and restored them as they were in times past and before." He also endowed the temples with various gifts for the daily service of the god Amen; appointed to their management different priests, and a select corps of soldiery, and gave fields and cattle for the morning services of the god Ra. It will be seen from this inscription that the queen is not mentioned as his daughter, and her relationship was probably mentioned at the injured side of the throne, where she was seated. The identification of her with Akencheres has been incorrect, for Akencheres is now discovered to be a form of the name Khuenaten or Akuenaten, the heretical Amenophis IV. Her name, Netemmut or Mutnetem, has no resemblance to it, while Akhuenaten is like Akhentheres, probably the true reading of the name. But all the epitomists make Horus succeeded by a daughter called Akenchres, or Chencheres, although, as three persons of this name appear in the lists, there is evidently a confusion or misplacement; and Netemmut neither has her figure borne in the ancestral procession, nor is registered in the regular succession of monarchs. The ecclesiastical writers placed the Exodus in her reign.

It will be seen from this inscription that the queen is not actually mentioned as his daughter; and Lepsius appears to have read her titles on this monument as "royal wife, mistress of the two countries." This identification of daughter is apparently due to the phrase about "the house of his noble daughter"; but if she was a royal lady or wife, who except Horus could have been her husband? Should she have had before this half-erased title that of "royal mother," it would explain the fact of her having been the mother of Horus, and a wife. Wasshe the wife of the monarch, the divine father Ai, and a daughter of one of the heretical kings or usurpers? It is impossible to tell; for although Tutanχumen and Ai both adored Amen Ra, their remains have been as remorselessly destroyed as those of the heretics. There is another statue of Horus in the British Museum very like in its adjuncts and composition to those of the Shepherds as pointed out by M. Mariette, and the sphinx of Mutnetem has on its head an attire very like Asiatic, and very unlike Egyptian style. There are a tablet and two jambs of a door in the collection of the British Museum[1] of a person of the same name as the monarch, Haremhebi, who was a standard bearer of the period. This person was also heir-apparent or *repa*, and it may be suspected the same individual mentioned in line 15, and entitled "that chief who dwells in the two lands Haremhebi," for the Haremhebi of these monuments above cited wears an uræus on the forehead as emblem of royalty, although his name does not appear in a cartouche. This remarkable fact is unique on Egyptian monuments, and can only be explained on the supposition that this Haremhebi was either an individual who had raised himself to the crown, or an independent ruler, or a king who had been deposed, but who had been allowed to retain in his sepulchre the emblem of his former power.

Line 1.—[The year — the — day of the month — of] the living Haremaχu, the powerful bull, maturing plans, lord of the vulture and uræus diadem, chief of the Treasures in Thebes, the hawk of gold] delighting in truth engendering the world, king of upper and lower Egypt, lord of the two

[1] Guide to the Egyptian Galleries' Vestibule, p. 36, Nos. 550-552.

countries RA TSER KHEPERU SATP EN RA, son of the Sun, lord of diadems HAR-EM-HEB, beloved of Amen, Har, lord of the palace, good god.

Line 2.—. . . . Kamutf, Amen Ra king of the gods nursed him, Har sa hesi protected in the rear of his limbs, he proceeded from the belly of Tebemssaf, a divine type in it, name.

Line 3.—. . . . he has been laid on the arm as a child, he[1] protected the land from the great to the little, he carried to it food and aliment. He was a youth; he had no prejudice.

Line 4.—. . . . . of mankind a divine type in his shape to behold, victorious form of his father Horus; he placed him behind him for the protection of his created race, bringing all

Line 5.—. . . . letting him know the day when he was at peace, he gave him his kingdom; for that god appointed his son in the face of mankind, he delighted to enlarge the breadth of his step when he proceeded, the day of his receiving his title, he gave

Line 6.—. . . . in face of the king, at rest in his *property*, rejoicing in his election,[2] he placed him at the gate of the country to conduct the laws of the country as prince [or heir-apparent] of this land like him, one alone without a second, the plans

Line 7.—. . . . . of men which came out of his mouth addressed before the prince of the palace, he went along to the opposition against him; he answered the king, he made pleasant to him that which came out of his mouth daily, not

Line 8.—. . . . . all his plans in the footsteps of the Ibis,[3] his services were the drops of the lord of Heser, exulting in his rights like Teti,[4] ravished at them like Ptah watching the morning, his things belonging to him, giving

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[1] *kra;* cf. Brugsch, Wörterb., p. 1167, who cites this passage. Cf. Brugsch, Wörterb., pp. 1263–64, *sart* or CAHT 'offence' or 'contrivance.'

[2] *satp* 'election' or 'selection,' referring to a choice, but not stated by whom.

[3] Hab or 'Thoth.' That is the bird *Hab* or 'Messenger,' the Ibis.

[4] *Teti.* This form occurs on the Turin altar.

Line 9.—. . . . . his property, treading on its[1] path, it makes his protection on earth for the length of eternity. Lo it was to him directing the two countries for a time of many years, appointed

Line 10.—. . . . . the principal persons submissive to the royal house, the chiefs of the nine bows [barbarians] of the North and South came to him, their hands spread out at his repulse. They adored him like a god, all things done were performed according to [his] orders.

Line 11.—. . . . . at his approach, the great fear of him was before mankind, entreating of him health and strength; he opened his mouth, father of millions of perfect propositions[2] of divine gifts to moor

Line 12.—. . . . passing by them the approved son of Horus from the gate of heaven as prince of this world like him. For lo to him this noble god Horus, lord of the palace, delighted his heart by establishing his son on his throne for ever [he] [he] ordered

Line 13.—. . . . of the house of Amen, passed Horus in exultation to Uas,[3] all eternal city; his son at his installation at Thebes to be crowned in presence of Amen, he conferred on him his title of king, making his time. Lo

Line 14.—. . . . crowned in his good festival, dwelling in Southern Apet. The majesty of that god Horus, lord of the palace, beheld his son with him; as king he was shown; he gave him his title and throne. Lo! to him made Amen Ra to be penetrated with joy; he saw.

Line 15.—. . . . . the day he made his peace offerings he brought them to that chief, the heir-apparent, residing in the two lands Haremhebi; he went forth to the palace; he placed them before him at the great shrine of his very noble daughter.

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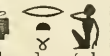
[1] Or her path. She made his protection. "So she was." The feminine pronoun ⟜ renders it doubtful if a goddess or the queen is not intended.

[2]  *keh sarut.* Cf. Brugsch, Wört, p 1263, *sarat* 'proposers' declared or 'thought.'

[3] Western Thebes.

Line 16.—. . . . . in honour, she united his beauties; she placed them in his fore part; the circle of the gods, lords of the abode of fire rejoiced at his crowning Nishem,[1] Uati,[2] Nit,[3] Isis, Nephthys, Horus, Set, and the circle of the gods, altogether[4] dwelling in the great seat

Line 17. . . . . proclaiming to the height of Nut, rejoicing to the peace of Amen, for Amen let his son come before him to the temple to place his crown on his head, to elevate his period of life like him, our images he placed to us.

Line 18. . . . . he gave us the decorations of the Sun, we glorify Amen through him, thou hast brought us our supporter. Give to him the triakonterides[5] of the Sun, the years of Horus as king. He has made thy pleasure in Apet,[6] An[7] and Hakaptah;[8] he ennobled them.

Line 19. . . . [beautiful] is the great name of that good god; he is entitled like the majesty of the Sun, "Horus, the powerful bull, great in plans, lord of the vulture and uræus diadem, great in treasures in Apet, the golden hawk, pleasing in truth, the engenderer of two lands RA TSER KHEPERU approved of the Sun, the son of the Sun HAREMHEBI beloved of Amen, giver of life, proceeding to the back of

Line 20.—the house of the Sun in the palace to the majesty of that noble god Amen king of the gods, his son before him, he united his beautiful decorations crowned in the helmet, for he conferred on him the circuit of the disk, the Ninebow barbarians were under his sandals, heaven [was] in a festival, the two countries rejoicing. The circle of the gods of the Ta Mera,[9] their hearts [were] delighted.

Line 21.—Lo! at him created beings in joy cried to heaven above. Great and little, they carried their joy throughout the whole earth; they rejoiced upon the celebration of this festival of the dweller in Southern Thebes Amen Ra king of the gods coming in peace [to]

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[1] Or Nuneb.

[2] Buto.

[3] Neith.

[4] *tum.*

[5] *set heb.* 'thirty year festivals.'

[6] Thebes, Heliopolis.

[7] Heliopolis.

[8] Memphis.

[9] Northern Egypt.

Line 22.—[to] Uas.[1] His majesty went sailing as the image of Harmachis; for lo he took possession of that land, he obtained it for the time of the Sun. He repaired the temples of the gods [of] the body of Atah[2] and Takans,[3] he chiselled the types.

Line 23.—of us all as before, behind, in good truth; for he made things at which the Sun rejoiced to see them. The destroyed[4] of former times he transported [them] to the house of his making, then conducted by the guardians of all tribes appointed with all that noble stones.

Line 24.—He sought the cities of the gods, which are in the places of that land. He possessed them as they were in times past, and before he augmented to them divine offerings daily all the vessels of their

Line 25.—temples, gilded with gold and silver, he prepared them with the priests and spondists with the elite of his army. He appointed for them fields and herds prepared with all things. They were timed for the adoration of the Sun.

Line 26.—Every morning thou hast been exalted by the dominions of thy Son doing thy will. RA TSER KHEPERU approved of the Sun. Give thou him millions of triakonterides; give them his powers over all lands, like Harsiesi for he has given satisfaction to thy heart in An,[4] united to the circle of thy gods.

---

[1] Western Thebes.

[2] One of the Northern cities.

[3] Name of Nubia.

[4] The form *kammhṯ* with the same determinative of *hair* is found, Lepsius, Todt. c. 146, 8. Brugsch, Wörtb., who reads this word 'widow.' Here it must mean defaced or spoiled. Possibly a variant of *kam* black.

FOUR NEW SYLLABARIES

AND A

BILINGUAL TABLET.

EDITED, WITH NOTES AND REMARKS,

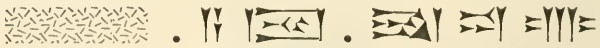
By H. F. Talbot, F.R.S., &c.

Read 3rd November, 1874.

These precious documents were brought from Niniveh by Mr. G. Smith during the summer of 1874. He has kindly allowed me to copy them, and has assisted me in deciphering the complex and intricate signs with which they are covered. The syllabaries which were originally found by Layard were published in the second volume of Rawlinson's inscriptions plates 1–4. Their value was speedily recognized by Assyrian scholars, and a wish has often been expressed that other tablets of the same nature might soon be discovered. Mr. Smith has fortunately secured those which are here for the first time published; and there is reason to believe that many others would reward the researches of future explorers of the ruins of Niniveh.

The present tablets are marked S 23, S 15, S 14, S 17 and S 12 in the British Museum.

The Syllabary S 23.

1. 

. . . . *Ittu* or *iddu*

This first word is very interesting, although effaced in the first column. Mr. Smith has already given it in his Phonetic Values No. 318 and explained it to mean Bitumen.

Herodotus says (I. 179) that the bitumen used in Babylon was brought from a city called Is. The modern name of the place is Hit, and the bitumen is still abundant there. Herodotus merely gave a Greek termination to the word. It is now evident that *Hit* was the Babylonian term for bitumen: *Ittu* in our tablet is merely the full form of the word which ends in *u* as all the words do in the third column of the syllabary. In 4 R 6, 45 is translated *ittá* or *iddá.*

2. *nigin* . . . . *napkharu*

3. *kû* . . . . *nadú*

4. *tû* . . . . *zubatu* (a victim)

I have given examples in my Glossary No. 475 of this use of in Accadian to express Victims.

5. *zi* . . . . *kimu*

Here we see that *ku* had sometimes the meaning of *kimu.* An example of this is found in 4 R 2, col. iv, 20, where it is said of evil dæmons that *matu kima kimi igammu* 'they devour men like *kimi*' which I have elsewhere translated 'sparrows': at any rate it must mean some small animal. Here the Accadian version has *ku* for *kimi.*

6. *us* . *ku* . *dimu*

Us and *Ku* signify 'masculine.'

7. *guk* . . . . *kukku*

8. [illegible] . [illegible] . [illegible]
lû .... *dalakhu*

An example of [illegible] rendered [illegible] *dalakhi* is found in 4 R 2, col. v, 17. And it is rendered [illegible] *dalkhu* in 4 R 7, col. i, 37. It seems to mean a disturber or injurer. It is often the epithet of an evil spirit.

9. [illegible] . [illegible] . [illegible]
dul .... *katamu*

Katamu is explained in 2 R 23, 48 by [illegible] *edilu* the bolt or bar of a door. Hence I suppose *katam* is the Hebrew חטם obturavit.

The following lines 10–23 are a greatly improved copy of the syllabary in 3 R lines 57–70.

10. [illegible] . [illegible] . [illegible]
kar .... *dapalu*

The middle sign is No. 108 of Mr. Smith's phonetic values.

11. [illegible] . [illegible] . [illegible]
udu *'lu* *immiru* (a sheep)

12. [illegible] . (*effaced*) . [illegible]
gukkal *gukkallu*

The word here effaced is [illegible] in the British Museum plate (3 R 70).

13. [illegible] . [illegible] . [illegible]
dib *lu* *tisbatu?*

The middle sign is partly effaced, and therefore doubtful.

14. [illegible] . [illegible] . [illegible]
pish *kattin* *khutsiru*

Compare the Hebrew words קטן and קצר, both of which mean 'short.' Arabic *kasir* (short).

15. 𒌋𒄿𒄿 . 𒁹𒁹𒁹 . 𒁹𒁹𒁹 𒁹𒁹𒁹
kish *kattin* *pizu*

Pizu generally means 'white'; hence perhaps this second *kattin* is the Arabic *kotn*, whence our word *Cotton*. *Kish* means 'dress,' Heb. כסה. *Makish* is also in use, which is the Heb. מכסה.

The next six signs are composed of the syllable 𒋗𒋗𒋗 *sak* or *sik* with various additions. This is No. 357 of Smith's phonetic values. For the sake of brevity I will denote it by A. Its compounds frequently denote woven objects.

16. 𒋗𒋗𒋗 𒋗𒋗𒋗 . A . 𒋗𒋗𒋗 𒋗𒋗𒋗 𒋗𒋗𒋗 𒋗𒋗𒋗
sik *sak* *supatu*

Supatu seems to be the same as *sipatu* 'cloth' or 'web.' See the following example (4 R 8, col. 3, 28) Accadian 𒋗𒋗𒋗 𒁹 is rendered by the Assyrian 𒁹𒁹𒁹 𒋗𒋗𒋗 𒋗𒋗𒋗 𒁹 . 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹 *sipati pizati* (with a white cloth), and the Accadian 𒋗𒋗𒋗 𒁹𒁹𒁹 is rendered by the Assyrian 𒁹𒁹𒁹 𒋗𒋗𒋗 𒋗𒋗𒋗 𒁹 . 𒁹𒁹𒁹 𒁹𒁹𒁹 *sipati zalmi* (with a black cloth).

The first column of No. 16 says that 𒋗𒋗𒋗 (cloth) was pronounced *sik* in Accadian.

17. 𒋗𒋗𒋗 𒋗𒋗𒋗 . A 𒁹 . 𒋗𒋗𒋗 𒁹𒁹𒁹 𒁹𒁹𒁹

For 𒋗𒋗𒋗 𒋗𒋗𒋗 3 R Syll. No. 64 reads 𒋗𒋗𒋗 𒁹𒁹𒁹𒁹𒁹 *Dar.*

18. 𒁹𒁹𒁹 𒁹𒁹𒁹 . A 𒁹𒁹𒁹 . 𒋗𒋗𒋗 𒋗𒋗𒋗 𒋗𒋗𒋗 𒋗𒋗𒋗
sis *pasasu*

On seeing this gloss I suspected that the word *pasas* denoted the *byssus* of the ancients. This conjecture was strengthened when I found that A 𒁹𒁹𒁹 is rendered *busus* in Smith's phonetic values No. 357. Finally *Sis* is the Hebrew שש *Byssus* frequently named in the Old Testament. A good deal will be found relating to this word in 2 R 25, 26 and following lines. The same symbol 𒋗𒋗𒋗 𒁹𒁹𒁹 is there explained 𒋗𒋗𒋗 𒋗𒋗𒋗 𒁹 *pasasu saku* (woven *pasas*) and also 𒋗𒋗𒋗 𒋗𒋗𒋗 𒋗𒋗𒋗 *pissatu*, and 𒁹𒁹𒁹 𒋗𒋗𒋗 𒋗𒋗𒋗 𒁹 *bussus*, and

buzus, and *napsastu*. These indications, although not very clear, appear to point to the word *Byssus*.

19. . A .

munsup *sukh* *khirtu*?

The meaning is doubtful. *Munsup* may be 'a plantation' (Arab. *nasb* to plant, Heb. נצב) and *khirtu* likewise, for *kiri* are 'woods.' *Sukh* is the Heb. שיח a tree, grove, or wood: Syriac *Sukha* שוחא has the same meaning. The reading in 3R (Syll. No. 66) is also .

20. . A .

gur *karú*

21. . A .

erin *erinu*

Erinu means a Cedar tree, Heb. ארז. In fact, this symbol with (wood) prefixed is constantly used for the Cedar. But in the published texts I find the name almost always written thus detaching from the first part of the word and adding it to the latter part. The new syllabary rectifies this. The word seems composed of *Sik* 'a tree' Heb. שיח and 'royal,' as being the royal tree. The Cedar of Lebanon certainly deserved the name. This simple explanation does not seem to have been given before.

22. . .

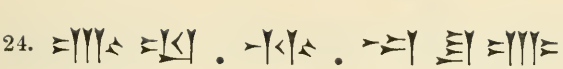
sâ *damaqu*

This symbol for *damaqu* (holy or pious) is not unfrequent, but it varies a good deal in form. It is No. 236 of Smith's phonetic values. Another form of it is .

23. . *same* .

gisimmar *gisimmaru*

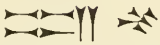
The central sign is the same as in 22.

24. 
gal *ik* *basú*

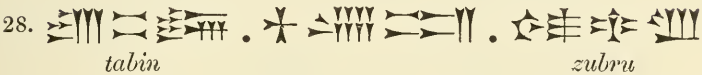
This agrees with a bilingual tablet in which *bit ikla* is explained by *bit basú.* (2 R 9, 21.) Also in 2 R 27, 18 col. 1 *ik* is explained *basú.*

REVERSE OF S 23.

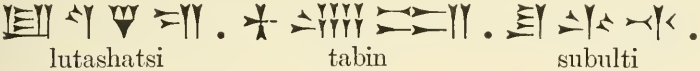
25. (*broken off*) . (*effaced*) .

26. (*effaced*) . (*effaced*) . 
simmu

27. (*effaced*) . .
kharrú

28. 
tabin *zubru*

Tabin is the Hebrew תבן 'straw,' and the very complicated central sign has the same meaning, as I think may be shown from the following line which occurs in tablet 174.


lutashatsi tabin subulti
let him throw forth *straw* *of corn*

kima kasu as raktu
like *straw* *for* *a bed*

שבלת *subulta* is used for various kinds of corn, as barley or oats (Buxtorf).

Kasu is the Heb. קש 'straw.'

Raktu is perhaps from רקע to spread out.

29. *sakil?* . *killu*

Perhaps these words mean bolts and bars: we have *sakkul* a door-bar, and כלא 'clausit.'

30. *sinik* . *binu*

Sinik may possibly be צינק 'a prison.'

31. *gallabu*

32. *lagar?* . *lagaru*

33. *bahilu*

34. (*effaced*) . *maskanu*

35. (*effaced*) . *maskanu*

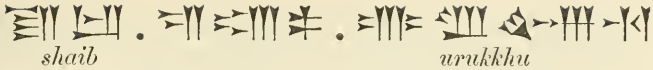
The two last are similar, but probably differed in the first column. (At this point there is a great fracture in the tablet.)

36. (*effaced*) . (*effaced*) .

37. (*effaced*) . *amilu* (a man)

According to 2 R 27, 45 (homo) with inserted means 'male,' and with inserted means 'female.'

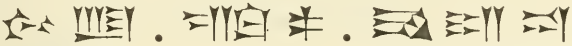
38. *kakkadu* (the head)

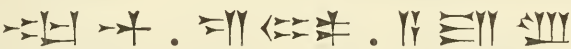
39. 
shaib *urukkhu*

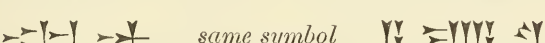
In this sign and the four following a letter is inserted between the two portions of the sign . This frequently happens. In No. 39 the inserted letter is doubtful. Whatever it is, it probably means 'white,' so that the complex sign is 'white headed.' For *urukkhu* is Heb. ירק 'pale' or 'white': and *shaib* has the same meaning: Heb. שאב, שיב and שוב 'gray hair,' 'old age.'

40.
mukh *mukkhu*

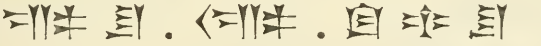
Mr. Smith thinks that this means 'the brain.' Heb. מוח. It is composed of inserted in 'the head.' This probably stands for which is *muk* (see old syllabary No. 161).

41. 
guthu *garradu* (a hero)

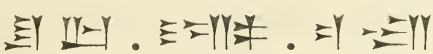
42. 
kan *adaru*

43. 
kan *same symbol* *adirtu*

The central sign is the same as which occurs frequently in the sense of 'a King.' *Adaru* seems to be the Hebrew עטרה a Crown. or Diadem.

44. 
kubsu

The word *kubsu* is explained in 2 R 25, 24 and several following lines. The passage is mutilated but I think that it shows that *kubsu* meant 'a crown' or a 'crowned head.'

45. 
sur *izzu*

Compare the old syllabary No. 483, which reads *Zur*. The central sign is often rendered by *izzu* which means 'fire.' Thus in Syll. 473 *izzu* is rendered by 'fire.' Similarly *Sur* means 'fire,' see Syll. 284 and 285 where *surru* is explained by *kalu* 'to burn,' and both have the same symbol.

46. . .
ká *ka* *bú*

Both of these words mean 'the mouth.'

47. . .
ka *abbu* (or *appu*, the face. Heb. אַף)

(End of Syllabary S 23.)

The Syllabary S 15.

This has been found to join on to an old tablet marked K 62.

The Nos. 48–65 agree with Rawlinson's Syllabary Nos. 682–700 but give several variants.

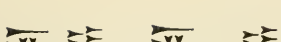
48. . .
tal *tal* *tallu*

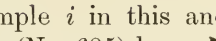
In the first column I have supplied from the old Syllabary No. 682, which also in the third column has

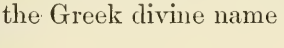
49. . .
bi *bi* *kasu*

In the first column I have supplied from the old Syllabary No. 683.

50. . .
kas *kas* *kasu*

51. 
ni *ni* *i*

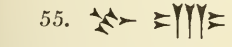
But instead of the simple *i* in this and the two following lines the old Syllabary (No. 685) has  *Iau*, which is like the Greek divine name *Ιαω*.

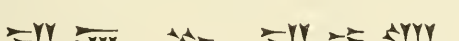
52. 
zalli *zal* *i*

For *zalli* the old Syllabary 686 has *zal*.

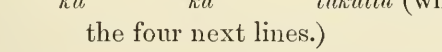
53.
ili (god) *i* or perhaps *ya*.

54.
ili *imin nabi*

Instead of *imin nabi* the old Syllabary 688 has *tsi nabi*  .

55. 
bû *bu* *siru*

In this and the next line the old Syllabary 689 changes into .

56. 
sir *bu* *siru*

57.
zu *sir* *sir gunu*

The old Syllabary 691 agrees in this word *sir gunu*.

58.
kû *ku* *tukullu* (which is repeated in the four next lines.)

Tukullu signifies 'cloth': Heb. תכלת cloth: but more

especially that which has been dyed with the Tyrian purple. It is here rendered by the Accadian [illegible] *ku;* which very frequently occurs in the sense of cloth, dyed with various colours; for instance in the Accadian tablet 174 I find the following line: [illegible] (white cloth)—[illegible] (black cloth)—[illegible] (yellow cloth)—[illegible] (green cloth).

Tukultu has likewise another meaning, that of 'service' or 'armed service,' and this, I believe, is also expressed by the symbol [illegible].

59. [illegible] . [illegible] . *tukullu.*

The first letter is doubtful: it may be [illegible]

60. [illegible] . [illegible] . (*same*).

61. [illegible] . [illegible] . (*same*).

62. (*effaced*) . [illegible] . (*same*).

63. (*effaced*) . [illegible] . [illegible] [illegible]
lu *udu*

Lines 64, 65 are an exact repetition of 63. Then follows the first column of another set of words, which at first sight seems not worth copying, for it is so broken that in general only the first letter remains. But on comparison it is found that these letters are identical with the first letters of words in the old Syllabary ranging from 751 to 766. They are useful therefore in confirming the accuracy of that part of the old Syllabary. I will notice two or three of them.

[illegible] . . . . . is part of the curious word *dingir* 'a god' in Syllabary 755.

[illegible] *kalbu* 'a dog' stands instead of [illegible] in Syllabary 762 which equally sounded *kalbu.*

And in Syllabary 764 is a most valuable variant, for in that line the old Syllabary has [illegible] *di,* but the present one [illegible], by which we learn that [illegible] had occasionally the sound of *di.* See Norris's dictionary p. 102 and 428 who compares [illegible] with the Hebrew טעם.

REVERSE OF S 15.

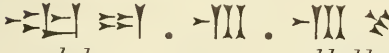
66.
nir *nir* (*effaced*)

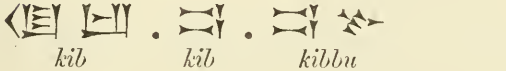
agrees with the old Syllabary No. 129.

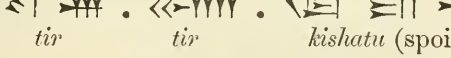
67.
zak *zak* *zaggu*

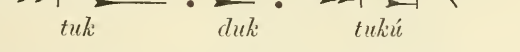
68.
khi *kau* *khú*

69.
kab *khabbu* [the left]

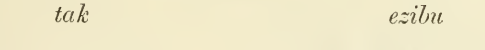
70. 
kib *kib* *kibbu*

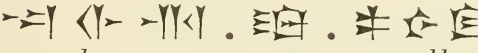
71. 
tir *tir* *kishatu* (spoil: plunder)

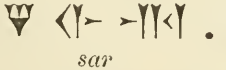
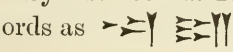
72. 
tuk *duk* *tukú*

73. 
tak *ezibu*

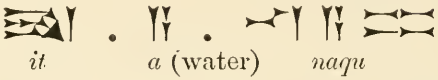
Smith's Phonetic Values No. 10 gives *ezibu* but not *tak*.

74. 
bar *parakku*

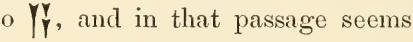
75. 
sar *parakku*

The old Syllabaries 1R 255 and 3R 142 agree, but write these words as  *bara* and  *sara*.

After 75 there is a line drawn across the tablet, and the next word stands by itself, thus:

76. 
it *a* (water) *naqu*

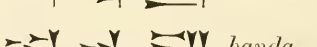
This is the Heb. נקה *naqa* 'to pour a libation.' The word is explained by in a similar manner in 2 R 24, 50. Again, comparing 4 R 5 col. i, 74 with col. ii, 71 answers to , and in that passage seems to mean *help* or *assistance.*

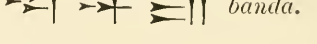
The word is explained by  *libation* also in 2 R 45, 35.

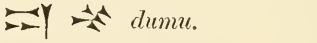
Mr. Smith informs me that the meaning of the line thus standing by itself is that it is the first line of the succeeding tablet and was intended to catch the student's eye and direct him to the next tablet.

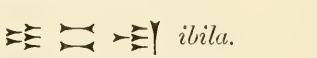
Another set of words then follows of which only the first column remains, and is therefore not of much use. But I will give a few of the words, as they are unusual.

batthu.

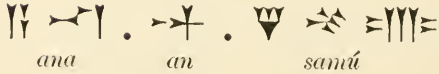
 *banda.*

 *dumu.*

 *ibila.*

 *unu.*

THE SYLLABARY S 14.

77. 
ana *an* *samú*

Samú (Heaven) is the singular of *Sami* (the Heavens). In Hebrew the plural only is found, written שמי; it is therefore very interesting to find the singular of it in Assyrian.

78. *dingir* . . *ilu* (a god)

79. *nab* . *nab* . *nabbu* (gods?)

Compare the old Syllabary Nos. 753–755.

(The rest of this column is broken off.)

Column II.

The next following lines 80 to 96 agree mainly with the old Syllabary 2R 1 Nos. 74 to 91 but supply a large number of signs which are broken off in that list.

80. . .

The is supplied from the old Syllabary No. 74. These words and signify 'every,' and occur frequently, *ex. gr.* . 'every day'; . or . 'every year.' It is uncertain whether should be transcribed *umu* or *sammu*.

81. *lakh* . *lakh* . *mitzú*

I have supplied the from the old Syllabary 75.

82. *sukkal* . *sukkallu*

83. *kaskal*? . *kas*? *kharranu*

Kharran signifies (1) a Road, (2) an Inroad or Raid, or hostile incursion.

84. *Illat* . *illat*

Illat is 'an army'; see numerous examples in my Glossary No. 355. Probably the Heb. חיל *exercitus*.

85. 𒀀𒀀𒀀 𒁹𒁹𒁹 . 𒁹𒁹 𒁹 . 𒀀𒀀𒀀 𒁹𒁹𒁹
rutu *rutu*

The old Syllabary No. 79 has 𒁹𒁹𒁹 instead of 𒁹𒁹𒁹.

86. 𒊓𒊓𒊓𒊓 . 𒀀 . 𒀀 𒁹𒁹
sam *tam* *tamu* (the day)

These words signify 'the Sun' and 'the day.'

87. 𒊓𒊓𒊓𒊓 𒋗 . 𒁹 𒀀 . 𒊓𒊓 𒊓𒊓𒊓 𒁹𒁹 𒀀 𒁹𒁹
sam su *erib* *samsi* (sunset)

𒋗 is more frequently written 𒋗 𒊓 when it means 'sunset.' It is an Accadian term.

88. 𒁹𒁹 𒁹𒁹𒁹𒁹 𒁹𒁹𒁹𒁹 . 𒁹 𒀀 𒊓𒊓𒊓 . 𒁹 𒊓𒊓𒊓 𒁹𒁹𒁹
nigin *kummu*

89. 𒊓𒊓 . 𒀀 𒁹𒁹 . 𒊓 𒁹𒁹𒁹 𒁹
e *uddu* *atzú*

The vowel *e* here stands alone, as it does in the old Syllabary 376 where it is explained by 𒁹𒁹 𒁹𒁹𒁹 *Qábu*, which probably means a pool or fountain; in Hebrew גבא. This word occurs in the annals of Assurbanipal, see my Glossary No. 513. *Uddu* and *Atzu* also mean a spring or uprising of water. I find the phrase 𒁹 𒊓𒊓 *bab atzi* 'the gate of the fountain' twice in the tablet 173: where it is said to be opened and shut, and to supply drink to men and women.

90. 𒊓𒊓𒊓𒊓 𒁹𒁹𒁹 . 𒀀 𒁹𒁹 . 𒀀𒀀𒀀 𒁹𒁹𒁹 𒁹𒁹𒁹
ukhu *ruhitu*

For *ukhu* the old Syllabary No. 426 has *ukh* 𒁹𒁹𒁹𒁹.

91. 𒁹𒁹 𒁹𒁹𒁹 . 𒁹𒁹𒁹 . 𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹
itu *arkhu* (a month)

92. 𒁹𒁹 𒁹𒁹𒁹 . 𒁹𒁹𒁹 . 𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹
itu *arkhu*

For *itu* the old Syllabary has 𒁹𒁹 𒁹𒁹𒁹 *idu*.

93. [illegible] . [illegible] . [illegible]
muru *gablu*

In this and the four following signs the old Syllabary begins with [illegible] and not [illegible]. This graphic variation occurs frequently.

94. [illegible] . [illegible] . [illegible]
nisak *niqú*

For [illegible] the old Syllabary has [illegible].

95. [illegible] . [illegible] . [illegible]
umun *mummu*

The central sign is rendered [illegible] in 2 R 33, 56. Instead of [illegible] *mun* the old Syllabary No. 89 has [illegible] which is also *mun*.

95. (*bis*) [illegible] . [illegible] . [illegible]
di *sikitu*

The word *sikitu* is restored by help of the old Syllabary No. 90. This sign [illegible] is also explained by [illegible] in 2 R 30, 13 where we find [illegible] *saqú* instead of *sikitu*.

96. [illegible] . [illegible] . [illegible]
si *nappakhu*

The last word is restored from old Syllabary No. 91.

Reverse of S 14.

(Nos. 97–105 agree with the old Syllabary in 2 R 2 Nos. 327–332 and the small fragment there placed after line 332, but supply many deficiencies.)

97. [illegible] . [illegible] . [illegible]
azalak (homọ) *kupar* *azlaku*

The name of some trade? the last word is restored from old Syllabary No. 327. Perhaps 'a carpenter' for, in 2 R 22, 12 the *timmu* of a [illegible] is spoken of (bench of a carpenter?). Compare Heb. אשל arbor.

98. 𒀀𒅗𒁹𒁹𒁹 . 𒀭𒁹𒁹𒁹 𒁹𒁹𒁹 . 𒅗𒁹𒁹𒁹 𒄀𒅗
dinik (homo) *min* *sibzu*

Sibzu is restored from the old Syllabary 328. It seems to be the name of some trade: perhaps 'an embroiderer' from שבץ.

99. 𒄩𒄩𒄩 𒁹𒁹𒁹 . 𒀭𒁹𒁹𒁹 𒆠 . 𒁹 𒆠 𒄀𒁹
khara (homo) *kab*? *iskabbu*?

The last word is restored from the old Syllabary No. 329.

100. 𒁹𒁹𒁹 𒁹𒁹 . 𒀭𒁹𒁹𒁹 . 𒁹𒁹𒁹 𒁹𒁹𒁹
sar *sarru* (a King).

The last letter 𒁹𒁹𒁹 is restored from the old Syllabary No. 330.

101. 𒁹𒁹𒁹 𒁹𒁹𒁹 . 𒁹𒁹𒁹 . 𒁹𒁹𒁹 𒄀𒁹
raba *rab* *rabbu*

The letter 𒄀𒁹 is restored from the old Syllabary.

102. 𒀀𒅗𒁹𒁹 . 𒁹𒁹𒁹 𒁹 . 𒁹 𒁹 𒁹
dim *rab-gam* *makutu*

In the middle sign the old Syllabary No. 332 gives 𒁹𒁹 erroneously, instead of 𒁹.

103. 𒁹 𒁹𒁹𒁹𒁹 . 𒁹𒁹𒁹 . 𒁹𒁹𒁹 𒁹𒁹 𒁹𒁹𒁹
makh *tsiru*

104. 𒁹𒁹 . 𒁹𒁹𒁹 . 𒁹𒁹𒁹 𒄀𒁹 𒀀
rabu

𒁹𒁹 means "the same."

105. 𒄀𒄀 𒀀𒁹𒁹 . 𒀀𒁹𒁹 . 𒁹𒁹 𒁹𒁹 𒁹
gul *kul* *abatu*

106. 𒁹𒁹𒁹 𒁹𒁹𒁹 . 𒀀𒁹𒁹 . 𒁹𒁹 𒁹𒁹𒁹 𒄀𒁹
zun *zun* *lib* *dabu*

This same explanation of *zun* as *lib dabu* is found in 2R 30, 68.

Lib dabu means a cheerful heart, or happiness. I know not whether we may infer that *zun* had sometimes that meaning. It seems to occur in Tiglath viii 27 when the king prays to the gods that his piety may be rewarded with *zuni dakhduti sanat*, happiness for many years, written *zuni.*

107. (*effaced*) . . *arratu* (a curse)

108. (*effaced*) . . *tsibutu* (a wish)

This is the Syriac צבותא voluntas, from צבא voluit. Mr. Smith informs me that often means 'a wish.' In the sense of 'a curse' it occurs in 4 R 7 line 1, where it is translated by the Assyrian *arrat* or in lines 39–42 where we find the curse of a father: the curse of a mother: the curse of a brother, &c., &c. See vol. 2 of these Transactions, pp. 58 and 72.

This sign is explained in 2R 7, 49 by *khasakhu* a wish, or desire: which is the Heb. חשק cupiit, desideravit. This verb also signifies *ligare* 'to bind' which applies to in the sense of 'a curse' or 'spell,' as we say '*spell-bound.*'

In the Michaux inscription we find, 'May the gods curse him (*liruru-su*) with curses or spells which cannot be untied (*arrat la napsuri*).'

The Syllabary S 17.

109. *zir* . (*effaced*) . (*effaced*)

110. *u* or *sam* . *lu* . (*broken off*)

111. . . (*broken*).
ib

112. . . .
dú

113. . . *isbu* (a flower) Heb. עשב.
u *ru*

114. . .

115. . .

116. . . .
khá *kha* *kua*

is rendered *nabutu* (an oracle) in Smith's Phonetic Values No. 320; and *Kua* was the name of the great oracle of Marduk at Babylon: see an interesting notice of it in Norris's dictionary p. 512. is explained in 2 R 48, 49 by *nabutu* 'a prophecy.' The following is an example of the use of the word, Annals of Assurbanipal p. 118. "This eclipse (prophecied) to the king of Elam, his death."

117. . . . (*kua*)

118. . . .

119. (*effaced*). . . (*kua gunu*)

This important gloss, *pish, kua gunu* is also found in a glossary which Mr. Smith brought home in his *first* expedition: where is rendered *pish*, thus leaving no doubt of its pronunciation.

The Tablet S 12.

This is a bilingual tablet in two columns, in very fair preservation. It begins with a list, apparently, of persons employed about the Court in Babylon.

120. . *kisallukhu*

I believe *kisalla* means 'a Court.'

121. . *kisallukhu* (as before).

122. . *kisallukhatu* (the feminine of the preceding).

123. . *akir* *kisallukhi*

This may mean 'another kisallukh.' Heb. אחר alius.

124. .

From what follows I conjecture that in the first column and in the second column mean door or gate. This last sign is given in 2 R 22 lines 1 to 7, where it appears to mean 'gate.'

125. . ... *nigab* *pitú* *dalti*
porter opener of the gate.

This word *nigab*, a porter or gate keeper, is well known from the legend of Ishtar.

126. . ... *nigab* *muselú* *dalti*
porter opener of the gate.

This word *muselú* is the participle of the verb *sela* to admit which occurs frequently. It is the S conjugation of *elah* Heb. עלל 'to enter' and therefore means 'to cause to enter' (*i.e.* to admit).

I have little doubt that means 'a gate.' I find an example of the word in the Accadian tablet 174 (with a gate) (of cedar wood).

To this may be added that followed by or evidently means 'gate-opener' in 2 R 44, lines 42 &c. being rendered by the Assyrian *mupattitu. naptartu*, and

naptitu derived from the Hebrew verbs פתה and פטר 'to open.' Indeed, we find in the same plate col. 3 line 39 the explanation . *sikkatu*, a gate or lock, related to the Heb. סגר, but here the last syllable *tu* is broken off. Elsewhere (2 R 45 lines 21 and 24) is rendered *sikkat* and *sikkatu*.

Sikkat are also 'gates,' i.e. defiles or narrow passes, between high mountains. See Tigl. iii, 19.

In the phrase mentioned above . the sign means 'open.' This explains the term which occurs so often in 2 R plate 8 in the sense of 'hand.' It is not the 'hand' simply, but the 'open hand,' *palma*.

127. .
(homo) *mut* *sha* *arpi*

In these lists is frequently rendered by *sha* which either means 'the man' or 'he who': 'the man who.'

128. .
(homo) *uddu* *sha namzaki*

129. .
(homo) *sakakti* *sha namzaki* (as before).

130. .
(homo) *mia dudu* *khaidu*

The first word is 'the man going by night': the night watchman: (night) (going). The second appears to be *khaidu* the Patrol, going the rounds, Arab. חוט and חאט ambiit, circumivit.

131. .
(homo) *rit tatara* *kanniku*

Tatara is explained in 4 R 19 by the Assyrian word *nammir* 'bright.' It comes from 'bright' or 'white.'

132. .
(homo) *si barbarra* *sha piti inu*

𒌋𒁕 means 'the eyes' in Accadian: 𒁹 𒁹 'open.' *Sha piti inu* is 'the man with open eyes' *i.e.* 'the vigilant watchman.' In 2 R 39, 4, we find this gloss: 𒁹 𒄑𒁕 . 𒌋𒁕 𒄑𒁕 𒄑𒁕 *barra, pitú,* which means that *barra* in Accadian is *pitú* (open) in Assyrian.

We now come to a long and curious list of the watchmen who were set to guard the city, apparently Babylon.

133. 𒀭𒀭 𒁹 𒄑𒁕 . 𒄑𒁕 𒄑𒁕 𒌋𒁕 𒀭𒁕 𒄑𒁕
innun *mazartu*

Both of these words are well known and frequently employed. *Mazartu* (custodia) is a verbal substantive derived from the Hebrew verb נצר *custodire.* The *custos* himself was called more simply *mazar* 𒄑𒁕 𒄑𒁕.

Since all the words of this column begin with 𒀭𒀭 𒁹 𒄑𒁕 written at full length, I have thought it sufficient to write *ditto.*

134. *ditto* 𒌋𒄑𒁕 𒀭𒀭 𒁹 𒄑𒁕 . 𒄑𒁕 𒄑𒁕 𒄑𒁕 𒄑𒁕 𒀭𒁕

This is a curious phrase: *innun ki innun,* the guard of the guard-house; (*ki* meaning 'a place'). The Assyrian phrase is *mazar tsibitti* the guard of the prison. Mr. Smith informs me that *tsibitti* often means 'a prison.'

135. *ditto* 𒌋𒌋 𒁕𒁕 . 𒌋𒄑𒁕𒁕 𒁹 𒄑𒁕 𒌋𒁕
innun *mia* *mazar musi*

That is, 'watchman of the night.' 𒌋𒄑𒁕𒁕 is constantly used to express 'the same' or 'ditto': here therefore we must read it *mazar.* I will write 'idem' for it in the rest of the column.

136. *ditto* 𒄑𒁕𒁕 𒄑𒁕 . *idem* 𒄑𒁕𒁕 𒄑𒁕 𒌋𒁕
hekal *hekalli*

i.e. the guard of the palace.

137. *ditto* 𒄑𒁕 𒄑𒁕𒁕 𒄑𒁕 . *idem* 𒀭𒄑𒁕 𒄑𒁕𒁕 𒄑𒁕 𒌋𒁕
babi *hekalli* *babi* *hekalli*

i.e. the guard of the palace gate.

138. *ditto* [cuneiform] . *idem* [cuneiform]
babi rabi *abulli*

i.e. the guard of the great gate of the city. *Abulli* is a new word.

139. *ditto* [cuneiform] . *idem* [cuneiform]
nakantu *nakanti*

i.e. the guard of the Treasury.

140. *ditto* [cuneiform] . *idem* [cuneiform]
naditu *naditi*

This I believe means the guard of the King's Corn-store or Granary. Heb. נד acervus.

141. *ditto* [cuneiform] . *idem* [cuneiform]
bit *biti*

i.e. the guard of the house.

142. *ditto* [cuneiform] . *idem* [cuneiform]
bit *ili*

i.e. the guard of the house of god—the guard of the temple. [cuneiform] is used in Accadian as the genitive case of [cuneiform], as in the well known name of Babylon [cuneiform] "gate of god" *Bab-ili.*

143. *ditto* [cuneiform] . *idem* [cuneiform]

i.e. the guard of the temples (houses of the gods). This is very curious. [cuneiform] (gods) is the Accadian plural of [cuneiform], and [cuneiform] is an Assyrian plural of [cuneiform]. We frequently find this sign of the plural [cuneiform] which means 'multitude': see the explanation of it given in 2 R 42, 27 [cuneiform] . [cuneiform] *mahadutu* [plurality].

The Accadian plural [cuneiform] 'gods' is also found in 2 R 22, 16 which relates to the holy vessels of the temples.

144. *ditto* [cuneiform] . *idem* [cuneiform] (*ikli*)

i.e. the guard of the fields. *Ikli* Chald. חקל *ager* is usually rendered by [cuneiform] in Accadian.

145. *ditto* . *idem* (*kiri*)

i.e. the guard of the woods or plantations, or fruit orchards.
(The rest of this column is broken off.)

Reverse of Tablet S 12.

This contains a long list of titles of honour.

146. (*broken*) . (*bil gubbu*)

This means a nobleman: see 2 R 32, 19 where we read . *gubba* . *makkhu* (a nobleman). Heb. גבה altus, elatus, eminens.

147. (*broken*) .

Bil kummu, lord of the palace.

148. (*broken*) .

Nin kummu, lady of the palace.

149. . *kisib gallu*

kisib is explained *rit,* and *rittu,* in the old Syllabary No. 120, where it is placed among words meaning rank or dignity. *Kisib* is probably the Arabic חסיב a nobleman. Schindler says (p. 668) *Hasib* vir magnæ existimationis: nobilis: generosus: patricius. In Rabbinic literature חשוב is vir honoratus, magnæ existimationis.

150. . *Bit gal* *ap gallu*

Here *ap* is rendered by a house. This is confirmed by the old Syllabary No. 188, which renders by *bitu.* Esarhaddon (col. vi, 25) calls his new building the *ap gal* or palace.

Since all these words are names or epithets of a king or nobleman, it follows that No. 150 𒀭𒈾𒈾𒈾 𒀭𒌋𒀀 also meant 'the king,' as I have already remarked in my notes to the legend of Ishtar; just as Pharaoh is now known to mean "the great house" *i.e.* "the king." Of course, 𒀭𒈾𒈾𒈾 𒀭𒌋𒀀 also meant the king's residence: the context will generally show which is meant.

The next seven numbers all commence with 𒀭𒈾𒈾𒈾 𒀀𒀭 *rubu mi*, a very common phrase, in which *rubu* signifies 'king' or 'prince,' but 𒀀𒀭 has not been explained.

151. 𒀭𒈾𒈾𒈾 𒀀𒀭 𒁹𒀀𒀭 . 𒀭𒂗𒆠 𒀭𒌅𒁕𒀀 𒁹𒁹𒁹
akriqu

152. 𒀭𒈾𒈾𒈾 𒀀𒀭 𒁹𒁹𒁹 . 𒄀𒄭𒌋𒌋 𒁹𒁹𒁹 (*imqu*).

Imqu is probably the Heb. עמק profundus, an epithet expressive of the profound wisdom of the king. The word seems to occur in the legend of Ishtar col. 2, 11. "Hea in the profound wisdom of his heart 𒀭 𒄀𒄭𒌋𒌋 𒁹𒁹𒁹 . 𒀭𒈾𒈾𒈾 𒁹𒁹𒁹 𒁀 *as imqi libbi-su* formed a plan," &c. But the niphal form *nimiqi* is much more common. It expresses deep thoughts, mysterious wisdom, &c. &c.

153. 𒀭𒈾𒈾𒈾 𒀀𒀭 𒁹𒁹𒁹 . 𒁹𒁹𒁹 𒁹𒁹𒁹 𒀭𒈾𒈾𒈾

Mudu 'wise' is a frequent epithet of the King.

154. 𒀭𒈾𒈾𒈾 𒀀𒀭 𒁹𒁹𒁹 . 𒁹𒁹𒁹 𒀭𒀀𒀭 𒁹𒁹𒁹

Ippisu is probably the same as *itpisu* 'active,' a very common epithet of the King.

155. 𒀭𒈾𒈾𒈾 𒀀𒀭 𒁹𒁹𒁹 . 𒁹𒁹𒁹 𒁹𒁹𒁹 𒀭𒈾𒈾𒈾

Khazzu or *Khazizu* is an unusual spelling of 𒁹𒁹𒁹 𒀭𒈾𒈾𒈾 𒀭𒈾𒈾𒈾 *khasizu* 'intelligent,' a very frequent epithet of the King. For example in Layard's inscriptions 43, 3 the king calls himself *irsu-mudú* the wise leader; *khasizu* intelligent: *pit uzni nimiqi* with an expanded mind profound.

156. 𒀭𒈾𒈾𒈾 𒀀𒀭 𒁹𒁹𒁹 . 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹

This epithet of the king, *tar ummani*, may mean 'son of the faith,' *i.e.* 'religious': but this is doubtful.

157. [illegible] . [illegible]

Bil tarti, an epithet of uncertain meaning.

158. [illegible] . [illegible]
rubu *rubú* (a king or lord).

159. [illegible] . [illegible]
ku (a lord) *rubú* (a lord).

160. [illegible] . [illegible]
nin (a lady) *rubatu* (a queen or lady).

This is an old form of the sign *nin*, almost reverting to the hieratic form of it.

161. [illegible] . [illegible]
[great man] *surbú* (king or chief)

162. [illegible] . [illegible]
[man] *bilu*

The six following words are also explained by *Bilu*, written in the same way. Although No. 162 is merely a 'man' or perhaps 'husband,' 'lord of the house,' all the others express lords or men of rank.

163. [illegible] (king) . *bilu.*

164. [illegible] (lord) . *bilu.*

165. [illegible] . *bilu.*

This is important; for it shows that [illegible] *Ak* meant 'a lord,' and therefore when Nebo is called [illegible] it only means that he was "the Lord," and not that *Ak* was his proper name. Another word for 'a king' was *Uk*, apparently related to *Ak*.

166. 𒌋 . *bilu.*

𒌋 very frequently means 'a king.'

167. 𒁹 𒁹 . *bilu.*

Here we see that a chief or nobleman was called 𒁹 𒁹 which means 'a Sword.' So also in Western Europe. In German *Degen* means 'a sword' but anciently it meant a brave chief or warrior: as in the Nibelungen Lied. The corresponding Anglo-Saxon word is *Thegen* or *Thægn* a soldier or knight; but more especially one serving the king; a THANE, nobleman, or baron. Bosworth's A.S. dictionary p. 99 k.

168. 𒋛 𒁹 (*sib*) . *bilu.*

This is a very frequent word for 'king.'

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169. 𒋛 𒁹 . 𒌋𒌋 𒌋𒌋 𒌋

sib *rihú*

This word is separated from the others by a line; which shows that it is the first word of the next tablet: and since *rihu* means 'a king' we see that the next tablet also began with another list of titles of honour. By the side of 𒋛 𒁹 in this line some one has written 𒌋𒌋 𒌋 *siba*, showing how he pronounced it. These marginal glosses are frequently useful.

This is not the whole of the interesting tablet S 12. There are yet two columns on one side, and one on the other, but they are injured, and in other respects seem less valuable than those I have given.

Addenda to the Preceding Syllabaries.

I have sought to find other passages in which these words occur, in order to ascertain their meaning more accurately, as well as to confirm the orthography of the tablets. I will here annex some of these which seem likely to be useful.

No. 4. *Ku* and *Zubatu* both mean 'a victim'; but they also both mean 'cloth.' It is therefore uncertain which is meant here.

No. 6. *Us* and *Ku* also mean 'King.' See No. 159 for *Ku* in this sense. The inscriptions of the old Accadian kings employ *us danga* in the sense of 'great king,' where the Assyrians would have written *sar dannu.*

No. 8. I will add some more examples of used as *dalakh.* In 4 R 26, 55, it is rendered *itallakh.* In 2 R 47, 10, *itallakhu*, 'they disturb.' In 4 R 11, 2, *ittatlakh*, in the T conjugation.

No. 10. Here is explained *Kar*, a wall, or walled fortress. Example: *Kardunias*, otherwise spelt an ancient name for Babylonia. See Norris's dictionary, p. 596.

No. 12. *Gukkal* may be Heb. עגל vitulus, for I think that *Lu*, occurs in both senses, viz., a 'sheep' in No. 11, and 'a calf' in No. 12.

No. 15. is also the name of a constellation in 2 R 49, 49.

In 2 R 57, 39, the god Ninib is called *Nin kattin barzil*, 'the lord of the coat of iron,' meaning the armour which he wore as god of war. Hence *kattin* must be the Hebrew כתן 'a coat': also *tunica, vestis.* In Syriac כתן means 'linen.' Gesenius thinks it is also cognate with the Arabic *kotn* (cotton), so that his authority confirms my conjecture.

No. 16. Here we see that [illegible] *Sik* meant cloth or dress. This is confirmed by 2 R 39, 52, where it is rendered *lubustu* (dress); and in the next line [illegible] *Ku* is rendered *nalbasu* (dress), a *niphal* form of לבש. *Supatu* is the same as [illegible] *Zubat* 'dress': See the legend of Ishtar, *Zubat bulti sha zumri-sha*, velum pudoris corporis ejus. In 2 R 25, 40, *zubat sarri*, 'the dress of a king.' In 2 R 30, 21, *zubat eliti* 'a royal dress,' in Accadian [illegible] *ku barra* 'dress of a king or prince.'

The tablet S 13 brought home by Mr. Smith is chiefly about clothing. The word [illegible] *supatu* occurs in it several times; also its Accadian equivalent [illegible] *Sik* 'cloth.' Among the kinds enumerated we find 'the cloth of Elam' [illegible]; the cloth of Martu (Phœnicia); and the cloth of Canaan, written [illegible] *Kanana*.

No 17. This explanation of [illegible] by *dahinu*, [illegible] is fully confirmed by a gloss in S 13, which explains it [illegible] *dahimatu*.

No. 18. This sign [illegible] will evidently require great attention before it is properly understood. It answers to the Assyrian *pasas* or *busus*, not only in the sense of *byssus*, but in several other meanings. For instance, *busus* in Assyrian means 'to pour' (Heb. פוצ spargere), *ex. gr.* Esarh. vi, 68 [illegible] 'pour a libation'! and though this has nothing to do with 'byssus,' yet the same Accadian monogram is employed. See the following passage in 4 R 26, 49, "Pour this magic liquor seven times over the body of the sick man"! Here the Assyrian has [illegible] *busus* 'pour it'! The Accadian [illegible]. These two signs are sometimes redoubled (which has a very complicated appearance), for example in 4 R 19, 11, where the Assyrian has *usatba*, 'he came' or 'he went.' The Hebrew verb פשע 'to walk or go,' seems to give a clue to this meaning, at least if it is susceptible of the reduplicate form פשש. Another and quite different meaning of the double sign is 'to groan or cry.'

See 4 R 19, 59, where it is rendered by the Assyrian *adammum*, 'I groaned' (perhaps Heb. דמע lacrymavit). A more remarkable instance is found in 4 R 10, 60, "I cried aloud for help, but no one drew nigh." Here "I cried aloud" is rendered in Accadian by this same reduplicate sign.

No. 19. This sign occurs also in 2 R 17, 6 where it appears to be translated by *zumri* (body). is rendered in Syll. 260 *zumur* (body or trunk) and *kimmatu* which may be the Arab. *kurmat* 'trunk of a tree,' see Catafago's dictionary. In our gloss No. 19 *Munsup* is probably the trunk of a tree, from root *nasb : khirtu* is 'a tree.' *Sukh* is its trunk or stock.

No. 20. The central sign is written in the syllabary 3 R No. 67 which I believe to be the correct form of it, for it is found again in 4 R 14. (No. 3, 13.) In our text this sign is explained *gur* and *karu* which I consider to mean 'a wall,' in Hebrew קר and קיר *paries : murus.* The gloss *karu* is well confirmed by the aforesaid example in 4 R 14 which reads, *Bil kabtu mustappiki kari*, 'the great lord, the builder of the wall.' Elsewhere we find *karu astappak*, 'I raised up the wall'; and *kari usepik*, see Norris's dictionary p. 594 who also quotes the gloss in 2 R 13, 20 . *Kar*, *Karu.*

No. 21. It must be admitted however that the scribes themselves sometimes wrote for the name of the Cedar, as in 2 R 50, 65.

No. 24. *Ikla* is also explained *Basu* in 4 R 28, 7 and 29, 37. *Basu* generally means 'to be,' and in the tablets of portents *ik* often means 'it will be,' and *nu ik* 'it will not be.' Thus 2 R 39, 44 "Corn in the land will be" ( ). *Ik* is however rendered *nasu*, not *basu*, in 4 R 25, 42 *salummatu nasi*, lift up the shadows, or the darkness.

No. 29. This complicated sign is confirmed by the passage in 2 R 16, 61 where is explained in Assyrian by *ikkillu.* In 2 R 61, 7 a temple of that name is mentioned, which may be rendered the *Bit killu*, and in the next line a similar temple having 'a splendid base.'

No. 30. This word is very difficult, but evidently of great importance. It generally has 𒄩, the sign for a tree or plant, prefixed to it, thus: 𒄩 𒁹 𒀭𒀭𒀭 𒊩𒊩𒊩 which is translated 𒄩 𒁹 *binu* in 4 R 26. 37 and 27, 5. This agrees perfectly with our No. 30. But what is the meaning of *binu?* I suspect that it is closely related to the Latin *vinum* (wine) or *vinea* (a vine). It is often followed by 𒄩𒁹𒁹𒄩 𒀭𒀭𒀭𒊩𒊩𒊩 𒁹 𒄩𒁹𒁹 *Uinnus* which appears to me to be the Greek *Οινος* (wine). If it is not that word the coincidence at least is singular. This phrase therefore contains eight cuneiform signs. Examples of it are found in 4 R plate 16, 31 and 25, 32 and 26, 36. The Hebrew language has the same name for 'wine,' in the form יין, so that the word was very generally diffused and might well be found in Accadian.

This explanation receives much support from the context of the passages in which 𒄩 𒁹 𒀭𒀭𒀭 𒊩𒊩𒊩 occurs. These usually relate that Hea sends his son Marduk to heal a sick man, or at least to comfort him, which he is directed to do by giving him precious liquors to drink, and pouring them over his body. It is evident that Wine is a most appropriate word in such passages as these. Moreover the word *binu* can hardly have any other meaning than 'wine' in the passage 4 R 27, 5 *Binu sha, as musari. mi la ishtu:* "Wine which among the songs (*i.e.* in the musical festivals) they drank without water." The *ακρατον μεθυ* or *vinum merum* may have been enjoined by their religion. So in Homer *ακρητοι σπονδαι.*

Since writing the above I have found the following explanation of 𒄩 𒁹 𒀭𒀭𒀭 𒊩𒊩𒊩 in 2 R 23, 17—viz. 𒄩𒄩𒄩 𒁹 𒁹𒁹 𒄩𒄩𒄩 *Gumalu*, which I think is the Hebrew כרמל *Carmel;* a fruit orchard; fruit garden; or vineyard (Furst and Gesenius). The word *Sinik* by which it is translated in No. 30 is the Heb. צינק an enclosure, derived from צנק to enclose, meaning 'a garden' enclosed from the waste, and hedged around. Similar roots are צנן and גנן to hedge or enclose.

No. 31. *Gallabu* appears to be 'the hand.' It is explained in 2 R 46 col. ii, 47 by 𒁹 𒄩𒄩 which immediately

follows . 'the hand.' And in same plate col. iv, 50 it stands next to *kati* 'the hand.'

No. 58. This word *Ku* 'cloth' occurs very frequently in S. 13 with various epithets added, such as explained *issu* 'new': explained *labiru* 'old': *ura* explained also *labiru* 'old.' Same tablet explains *Ku* by *supatu* 'cloth' and *ittu sha zubati* 'kinds of cloth?' Another important rendering of *Ku* is which may be read *saku* or *garku*. This is explained in Assyrian by *lubus* (dress) Heb. לבש. This is followed by the composite words . explained (ditto of a god) *i.e.* 'the dress of a god,' where observe that is merely the Accadian genitive case of . And then . explained 'the dress of a king.' I also find this word in 2 R 25, 26 combined with *pasasu* 'byssus' so as to mean apparently 'a linen dress.'

No. 75. Here is explained *Sar* 'a king,' whence we find in 4 R 9, 35 the derived term *naram* explained *sarrut*, 'royalty.'

No. 76. sometimes means 'a libation,' see 2 R 58, 31. *Nadaluni* (they sprinkle), (the altars), (with libations). *Nadaluni* is probably the Chald. נזל *nazal*, Syr. נצל fluxit; fudit super.

No. 88. *Kummu*, generally means 'a palace.' This phrase preceded by *bit* 'dwelling' and followed by *sara* 'a king' occurs in 2 R 61, 4 and probably means 'the king's palace.' *Nin* *sara* also occurs in 2 R 59, 30 as an epithet of the goddess Gula; and of a male deity in 2 R 60, 13, where *Nin* is exchanged for *Bil*? These titles are probably identical with the *bil kummu* and *nin kummu* of the present paper (see Nos. 147, 148).

No. 91. This is one of the most important words in the syllabary. is frequently used for 'a month,' and so

is *arkhu* which is the Heb. ירח 'the Moon' and also 'a month.' Now here our syllabary informs us that the Moon was also called *Itu*, or if we follow the older syllabary, *Idu*. Observe how beautifully this agrees with Suidas, *Αιδω. ἡ σεληνη παρα Χαλδαιοις.*

No. 96. *Nappakhu* perhaps means 'a Trumpet,' from the Heb. *napakh* נפח 'to blow.' is also rendered *nappakhu* in 2 R 58, 58 where it is an epithet of Hea god of battles. It will be observed that the word is also rendered *Si* in our syllabary. means 'a Horn' in Accadian. This agrees very well.

No. 98. *Sibzu* seems related to *suzubbu* a kind of dress mentioned in S. 13. Buxtorf makes שבצ *chlamys ocellata.*

No. 99. *Iskabbu* may mean a foolish man: of weak intellect, see Catafago's dictionary p. 128, 129. *Iskabbu* is used as a term of reproach and contempt in Esarh. col. ii, 15.

No. 123. *Akir kisallukhi* may mean the deputy of a *kisallukh* or his under-officer. אחר is used in Hebrew for 'second.' In the portion of this syllabary which I have not printed, there is mention of an officer called a *baru*, and then of another called . *akir bari*, the deputy of the *baru*.

No. 124. Here *iddu* seems to mean 'the opener' of the gate, he who 'throws it open, from ידה 'to throw.'

No. 126. I have here translated *sikkat* 'a gate,' see 4 R 17, 5 where it is rendered in Accadian by which confirms the former examples which I have given. There is an important variant *sikrat* in 2 R 62, 71 (see the marginal note there). This brings the word very close to the root I have suggested (Heb. סגר clausit).

Nos. 128 and 129. This gloss is found also in 4 R 17, 4 where it is rendered as here, *namzaki*, which probably means 'gate opener,' from the Arabic מזק 'to separate.' Folding doors are separated when opened. The word *namzaku* is also found in 2 R 23, 40 explained *arbu* (Heb. ארבה door, or window): which is governed by the word in the preceding

line [illegible] *muselu* (opener of), explained [illegible] *niptú* (opener). The word *muselu* occurs in the preceding glossary No. 126. These confirmations are very satisfactory.

No. 131. *Rit* may be 'sight,' from ראה 'to see.' But the value of the sign [illegible] is variable and uncertain.

No. 159. Here we have [illegible] *Ku* explained *Rubu* 'a king.' In accordance with which, *naram ku* is explained *rubut* 'royalty' in 4 R 9, 18. This *naram* is a formative particle, apparently the same as *nam*. So in 4 R 9, 35 from [illegible] *Sar* 'a king' (see No. 75 of this paper) we find the derived word *naram* [illegible] explained *sarrut* 'royalty.'

THE ELEVENTH TABLET OF THE IZDUBAR LEGENDS.

The Chaldean Account of the Deluge.

By G. Smith.

TEXT AND NOTES TO ACCOMPANY PAPER

Read 3rd December, 1872.

Since my paper on the Deluge Tablets, read before the Society, 3rd December, 1872, I have found several new fragments in the Museum Collection; and in my two journeys to the site of Nineveh I have procured about a dozen other fragments of these legends. This accession of new material enables me to supply many of the wanting portions of the legend, and to correct other portions where, from the mutilation or obscurity of the text, the translation was doubtful. Along with the text of the inscription I am therefore now able to give a more correct and complete translation, and at the same time to supply some of the details of the story which are of great interest, and the loss of which was before a serious drawback.

The Chaldean text of the Deluge forces on our notice many questions in relation to the narrative in Genesis, and in my own opinion its statements differ more from those of the Book of Genesis than some suppose; but it is my purpose to confine myself as much as possible to the translation of the inscription and a few necessary notes.

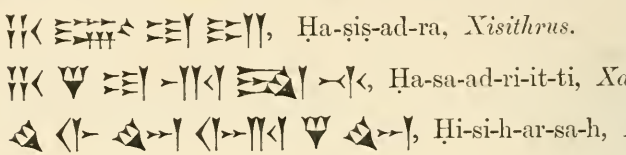
One of the most interesting points which comes out from the new material is the phonetic name of the hero of the Flood. This has been looked forward to with great interest, and its absence has hitherto been considered as a serious want in the story.

I have already pointed out the correspondence of the name of his father Ubara-tutu with the Otiartes and Ardates of the Greek text of Berosus;[1] but the name of the hero of the Flood himself, written usually with the monograms [illegible] and [illegible], afforded no satisfactory phonetic reading. The name was however written phonetically in line 22 of Column IV of the Deluge text, where at first I did not recognise it as a proper name at all, and translated it by the meanings of the elements "reverent and attentive." I, however, found a second example of it mutilated at the beginning, but perfect enough to set the question at rest as to the phonetic form of this name. This example is on the important fragment of Column I, lines 36 to 51, which I brought from Assyria in 1873, and which were presented by the Proprietors of the Daily Telegraph to the British Museum. The two examples of the name are: on line 45 of Column I [illegible], and on line 22 of Column IV [illegible] Ad-ra-ḥa-ṣiṣ. It is evident that this name is composed of two elements, Adra-ḥaṣiṣ, the reversal of the position of which forms Ḥaṣiṣ-adra, the Xisuthrus or Xisithrus of the Greeks. Many of these ancient names with two elements were used with either element first, as Iriba-vul or Vul-iriba, Assur-duri or Duri-assur, and among the Jews Jehoahaz or Ahaziah. Numerous other examples might be given from the inscriptions; but this change is so well known that it requires no proving; beside which, the monograms of the name of the Flood-hero appear to be arranged in this way, for while the phonetic reading given on the tablet is Adra-ḥaṣiṣ, the second monogram in the name [illegible] appears to represent *adra*, as I have found [illegible] equal to [illegible] na-ad-ru.

In rendering the ancient names into Greek it was customary to make the Greek *X* the representative of חש or חס at the commencement of a name; thus [illegible] Ḥaṣiṣ would be Xis, just as [illegible] Ḥa-sa becomes Xa in Xathrites. In order to show how close a representation of

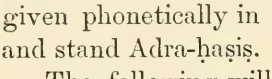
[1] This correspondence was noticed independently by Mr. Basil Cooper and Rev. D. H. Haigh.

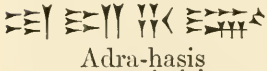
Ḥaṣiṣadra we have in the Greek Xisithrus, I give three, examples of cuneiform names and Greek equivalents:—


Ḥa-ṣiṣ-ad-ra, *Xisithrus.*
Ḥa-sa-ad-ri-it-ti, *Xathrites.*
Ḥi-si-h-ar-sa-h, *Xerxes.*

I have, therefore, in my translation adopted Xisithrus as a fair representation of the cuneiform name; and where it is not phonetically written, I transcribe Ḥaṣiṣ-adra, taking as equal to Ḥaṣiṣ, and as equal to *adra*. At the same time it must be remembered that where it is twice given phonetically in the tablet, the elements are reversed, and stand Adra-ḥaṣiṣ.

The following will be a comparison of the names of the two last antediluvian generations from the Cuneiform Inscriptions, Berosus, and the Bible:—

Cuneiform.	*Berosus.*	*Bible.*	
 Ubaru-tutu or Ardu-tutu.	Otiartes (properly Opartes) or Ardates.	למך Lamech	*strife or overthrowing.*

Cuneiform.	*Berosus.*	*Bible.*	
 Adra-ḥaṣiṣ or, Ḥaṣiṣ-adra.	Sisuthrus or Sisithrus.	נח Noah.	*rest, or peace.*

Here it will be seen that although with the changing of the corrupt τι in Otiartes to π, there is a close agreement between the Cuneiform names and those of Berosus, there is no resemblance between these and the Hebrew.

I think, however, that a similar meaning was intended to be expressed in both cases. I have stated that Ubara-tutu

means "servant of the god Tutu," and Ubara is certainly equivalent to Kidin[1] (Castelli כדן) enslaved, or reduced to servitude. Therefore if Tutu is a god, my former explanation would be very probable; but is sometimes merely a prefix, and may possibly mean "reducer" or "subduer," making the meaning "reducer to slavery," in correspondence with which the name of this patriarch in Genesis, למך, is stated to mean "overthrower." The name of the tenth patriarch in the inscription, Adra-ḥaṣiṣ, consists of two elements, *adra* "fear," "reverence," or "worship," and *haṣiṣ* "attentive," "careful," and the meaning of the name is probably "attentive to worship," or "reverential," implying the pious character of the patriarch, in direct contrast with the name of the father, just as the name of the tenth patriarch in Genesis, נח "rest" or "peace," is in direct contrast with the name of his father, which expresses "strife"; and although Noah's name is not the equivalent of the Chaldean Adra-ḥaṣiṣ, his character for piety is the same.

With regard to the meanings of these names there will, however, probably be much difference of opinion among students, and these remarks must be taken rather as suggestive in the present state of the inquiry, and not in any sense as final.

It is a curious fact, which I have noticed with reference to other early names, that the cuneiform phonetic reading Adra-ḥaṣiṣ is Semitic, and serves to show that in later times the inhabitants of the Euphrates' Valley often used Semitic translations of the early Turanian names, and not mere transcriptions.

[1] In one of the syllabaries we have U-ba-ra, equal to and Ki-di-nu (wrongly printed in Cuneiform Inscriptions, Vol. II, p. 3, No. 254, Ki-di-du). Another closely allied form is Bur-na, which also means Kidin in Burna-buriyas Cuneiform Inscriptions, Vol. II, p. 65, line 34, where, by error in lithographing, appears *Kudin* for *Kidin*.

TEXT,

Interlinear Transcription, and Translation of the Eleventh Tablet of the Izdubar Series.

Column I.

1. Iz - ḍu - bar a - na sa - su - va izakkara a - na
Izdubar to him also said to

Ḥasis- adra ru - u - ki
Xisithrus the remote :

2. a - na - aḍ - ḍa - la ḍe -ma Ḥaṣiṣ- adra
"I am burdened with the matter Xisithrus,

3. mi - na - tu - ka ul sa - na - a
Why thou repeatest not

ki - i - ya - (a) - ti va at - ta
to me from thee,

4. u at - ta ul sa - na - ta
and thou repeatest not

ki - i - ya - si - (v. ti) va at - ta
to me from thee;

5. gu - um - mur - ka lib - bi a - na (v. ana)
thy ceasing, my heart to

e - pis tu - qu - un -tu (v. ti)
make war

6. ..... na - da at - ta e - li (v. lu)
presses, of thee, I come up

ẓe - ri - ka
after thee

7. ..... ki - i ta - aẓ -bat va ina puḥri
..... *how thou hast done, and in the assembly*

ili ba - la - ḍa tas - (hu) - um
of the gods alive thou art placed."

---

8. Ḥaṣiṣ- adra ana sa - su - va izakkara
Xisithrus to him also said

a - na Iz - ḍu -bar
to Izdubar:

9. Lu - up - te - ka Iz - ḍu - bar
Be revealed to thee Izduḥar

a -mat ni - zir - ti
the concealed story,

10. u pi - sak - ti sa ili ka - a - sa
and the judgment of the gods to thee,

lu - uq - [bi] - ka
be related to thee.

11. alu Su - ri - ip - pak alu sa ti - kin su
The city Surippak the city where thou

(v. I) (v. su) at - ta .... ti sak - nu
standest ..... *placed*

12. alu su - u la - bir va ili
that city is ancient .... the gods

kir - bu - su (v. I)
within it

13. ..... arad -su-nu ili rabati
..... *their servant the great gods*

14. ..... A - nu - u
..... *the god Anu*

15. ..... Elū
..... *the god Elū*

16. ..... Nin - ip
..... *the god Ninip*

17. (?) u ilu ..... bel - nu - gi .
and the god ..... *lord of Hades*

18. a - mat ṣu - nu u - sa - an - na - a ana
their will he revealed in the

ki ..... va
midst ..... *and*

19. ..... sīm - tus - su si - mi va
[I] his will was hearing and

i - ga - ab - [bi - ya - a - si]
he spake [to me]

20. [Su] - ri - ip - pa - ku - u abil
Surippakite son of

Ubara - [tu - tu]
Ubaratutu

21. ..... ta bi - ni elap aḥ - ḥar
..... *make a ship after*

sa .....
this .....

22. ..... ab (?) - ku - ra zi - ir va
..... *I destroy (?) the sinner and*

na - pis .....
life .....

23. su (?) - li va zir nap - sa - a - ti ka - la - ma
cause to ascend the seed of life all of it,

a - na lib - bi elappi
to the midst of the ship.

24. e - lap sa ta - ban - nu - si at - [ta]
The ship which thou shalt make

25. (600) ammat nis - du - da mi - na - tu sa
.... *cubits shall be the measure of its length, and*

26. (60) ammat mit- ḥar ru - bu - uṣ - ṣa u
.... *cubits the amount of its breadth and*

mu - sal sa
its height.

27. ..... va zu - ab sa - a - si ẓu - ul - lil - si
..... *Into the deep launch it."*

28. [a] - na - ku i - di va izakkara a - na
I perceived and said to

He - a bi - ili - ya
Hea my lord,

29. e - lap bi - ni sa taq - ba - a at - ta
the ship making which thou commandest me

ki - a - am
thus

30. . . . . a - na - ku ib - bu - us
when (?) by me it shall be done,

31. . . . . abli um - ma - nu u si - bu - tu
[I shall be derided by] young men and old men.

32. He - a pa - a - su ibus va i] - qab - bi
Hea opened his mouth and spake,

i - zak - ka - ra ana arad - su ya - a - tu
and said to me his servant,

33. . . . . ta - gab - ba - as - su - nu - tu
. . . . . *thou shalt say unto them,*

34. . . . . sa i - zi - ir - an - ni va
. . . . . *he has turned from me and*

35. ..... lu - u ..... is - sak - kan
.... *fixed*

eli (?) - ya
over me

36. ..... ki - ma kip - pa - ti .....
..... *like caves* .....

37. ..... lu - da - an e - lis u sap - [lis] .....
..... *above and below* .....

38. .....- e pi - ḥi e - [lap] .....
..... *close the ship* .....

39. ..... a - dan - na sa a - sap - pa - rak
..... *the flood which I will send*

[kuv - va]
to you.

40. [ki - rıb sa] e - ru - uv - va bab elappi
[*into it*] *enter and the door of the ship*

tir - [ra]
turn.

41. [a - na] lib - bi sa se-par- ka sa - su - ka
Into the midst of it thy grain, thy furniture,

u sa - ga - [ka]
and thy goods,

42. [ellat] - ka ki -nat- ka ṣa -lat ka
thy wealth (?), thy women-servants, thy female slaves

u abli um -ma- [ni]
and the young men,

43. [bu - ul] ẓeri u -ma- am ẓeri ma - la
the beasts of the field, the animals of the field,

u - sim -mi- ir [va]
all I will gather and

44. [a - sap] -pa-rak- kuv -va i - na - az -za- ru
I will send to thee, and they shall be enclosed

bab - [ka]
in thy door.

---

45. [Ad] - ra - ḥa- ṣiṣ pa - a -su ibus va iqabbi . . . .
Xisithrus his mouth opened and spake and . . .

46. [i - zak] - kar ana He - a be - ili - [su]
said to Hea his lord:

47. [la] man-ma-a elap ul e-bu-us .....
"Any one the ship will not make .....

48. [ina qaq]-qa-ri e-zir u .....
... *on the earth fixed* .....

49. ..... tu lu-mur va e-[lap] .....
..... *I may see also the ship* .....

50. ..... a ina qaq-qa-ri elap .....
..... *on the ground the ship* .....

51. [elap] bi-ni sa taq-ba-a .....
the ship making which thou commandest me .....

52. sa ina .....
which in .....

Column II.

1. dan-nu .....
strong .....

2. ina ḫa-an-si im-mi ..... na-sa
on the fifth day ..... *it*

3. ina gan-ḫi-ṣa 14 ta-a-[an] ... iguri su
in its circuit 14 *measures* ..... *its frame*

4. 14 ta - a - an im - ta - sar .....
14 *measures it measured* .....

eli sa
over it

5. ad - di la - an - si sa - a - si .....
I placed its roof, it .....

e - ṣir si
I enclosed it.

6. ur - tag - gi - ib - si a - na 6 su
I rode in it on the sixth time,

ap - [ta - ra - aṣ ṣuqut]- ṣu a - na 7 su
I examined its exterior on the seventh time,

7. kir - bi - iṣ - ṣu ap - ta - ra - aṣ a - na
its interior I examined on the

[8] su
eighth time;

8. iz - ru - i mī qabal sa lu - u am - qut
with planks the waters from within it I stopped,

9. a - mur pa - ri - ṣu u hi - ṣuḥ - ti
I saw rents and the wanting parts

(v.) ad - di
(v. tu)
I added,

10. 3 tan (?) ku - up - ri at - ta - bak a - na (v. ana)
three measures of bitumen I poured over

kiri (v. ki - i - ri)
the outside,

11. 3 tan (?) kuupri [at - ta - bak] a - na lib - bi
three measures of bitumen I poured over the inside,

12. 3 tan (?) zabi na - as iz - ṣu - uṣ - ṣu - ul
3 . . . *men carrying its baskets (?)*

sa i - zab - bi - lu bissati
they constructed boxes

13. e - ṣu - ur tan bissati sa i - ku
I gave (?) the boxes for which they had sacrificed

lu - ni - iq - qu
an offering (?)

14. 2 tan(?) bissati u - pa - az - zi - ru
two measures of boxes I had distributed to the

ma - laḥi
boatmen,

15. a - na . . . . . ud - dib - bi - iḥ alpi
to . . . . . were sacrificed oxen,

16. as . . . . . i im - mi sam - ma
. . . . . *for every day,*

17. ina . . . . . [ku - ru] - un - nu bissati u karan
in . . . . . wine in receptacles and wine

18. . . . . ki - ma mī nār va
[I collected] like the waters of a river, also

19. . . . . ki - ma (v. i) tu - mi - a
[food] like the dust (?) of the

irziti va
earth, also

20. . . . . bis - sa - a - ti qa - ti
[I collected in] boxes, with my hand I

ad - di
placed.

21. . . . . Shamas - ra . . . . . be - e elappi
. . . . . *Shamas* . . . . . *material of the ship*

gam - rat
completed,

22. . . . . ru - su - qu - va
. . . . . *strong and*

23. gi - ir - ma - ru - i us - ta - bi - lu e - lis
the reed oars(?) of the ship I caused to bring above

u sap - lis
and below.

24. . . . . [il] - li - ku si - ni - pat - ṣu
. . . . . *they went in two thirds of it.*

25. nin i - [su - u e] - ẓi - in - si nin
All I possessed the strength of it, all

i - su - u e - ẓi - in si kasap
I possessed the strength of it silver,

26. nin i - su - u e - ẓi - in - si ḥuraẓ
all I possessed the strength of it gold,

27. nin i - su [-u e - ẓi - in] - si zir
all I possessed the strength of it, the

napsati ka - la - ma
seed of life, the whole

28. us - te - li a - na elappi kala
I caused to go up into the ship, all

kina- ti - ya u ṣa - lat - ya
my male servants and my female servants,

29. bul zeri u - ma - am zeri abli
the beast of the field, the animal of the field, the sons

um - ma - a - ni ka - li - su - nu u - se - li
of the people, all of them I caused to go up.

30. a - dan - na Samas is - ku - nav - va
a flood Shamas made and

31. izakkir ku - uk (?) - ru (?) li - la - a - ti
he spake saying (?) "In the night

u - sa - az - na - an - nu mu ta
I will cause it to rain from heaven

ki - ba - a - ti
heavily,

32. e - ru - ub ana lib - bi elappi va pi - ḥi
enter to the midst of the ship and shut

bab - ka (v. elappi)
thy door (v. *the ship*).

33. a - dan - nu su - u ik - ri - da
That flood happened [*of which*]

34. izakkir ku - uk - ru ina li - la - a - ti
he spake saying: "*In the night*

u - sa - az - na - na (v. i - za - an - na - nu)
I will cause it to rain (v. *it will rain*)

sa - mu - tu ki - ba - a - ti
from heaven heavily."

35. sa im - mi at - ta - ri bu - na su
In the day I celebrated his festival,

36. im - mu a - na i - tab - lu - ṣi pu - luḥ - ta
the day of watching, fear

- si
I had

37. e - ru - ub ana lib - bi elappi va ap - te - ḥe
I entered to the midst of the ship and shut

ba - a - bi
my door.

38. a - na pi - ḥe - e elappi a - na
To close the ship to

Bu - zu - ur - sadi - rabi ma - laḥ
Buzur-sadirabi the boatman

39. e - kal at - ta -din a - di bu -se- e su
the palace I gave with its goods.

40. rag-mu- u se- e - ri ina na -ma- ri
The raging of a storm in the morning

41. i - lam - ma is - tu i - sit same
arose, from the horizon of heaven

ur -pa - tu za- si - tu
extending and wide.

42. Vul ina lib - bi - sa ir -tam-ma- av - va
Vul in the midst of it thundered, and

43. Nabu u Saru il - la - ku ina maḥ - ri
Nebo and Saru went in front,

44. il - la - ku gu - za - lu - i sadu
the throne bearers went over mountains

u ma - a - tu
and plains,

45. Nu - kul - li Dabara - rabu (v. dannu)
the destroyer Nerqal

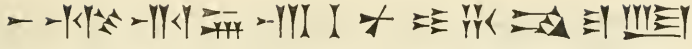
i - na - aṣ - siḥ
overturned,

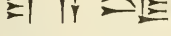
46. il lak Nin - ip mi - iḥ - ri
Ninip went in front

(v. ra) u - sar - di
and cast down,

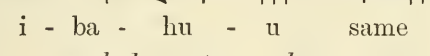
47. A - nun - na - ki is - su - u
the spirits carried

ṣa - pa - ra - a - ti
destruction,

48. 
ina nam - ri - ir - ri -su-nu i -ḥa - am -ma- ḍu
in their glory they swept

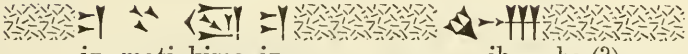

ma - a - tu
the earth;

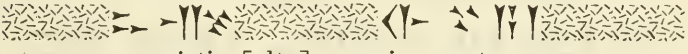
49.
sa Vul su - mur - ra - aṣ - ṣu
of Vul the flood

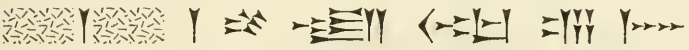

i - ba - hu - u same
reached to heaven.

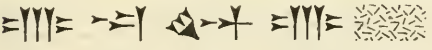
50.
..... Nam - ru ana ṣeri (?) ut - tur - ru
The bright earth to a waste was turned,

Column III.

1. 
.... iz mati kima iz ..... iḥ - ba (?)
the surface of the earth like ..... it swept,

2. 
....., napisti [ultu] pani mat-a .....
it destroyed all life from the face of the earth .....

3. 
..... gab - li eli nisi
the strong deluge over the people,


u - ba - hu - u [same]
reached to heaven.

4. ul im - mar a - ḥu a - ḥa - su ul
Brother saw not his brother, it did not

u - ta - ad - da - a nisi ina same
spare the people. In heaven

5. ili ip - tal - ḥu a - bu - ba - av - va
the gods feared the tempest and

6. it - te - eḥ - ṣu i - te - lu - u ana
sought refuge; they ascended to the

same sa Anu
heaven of Anu.

7. ili kima kalbi kun - nu - nu
The gods like dogs fixed

ina ka - ma - a - ti rab - ẓu
in droves prostrate.

8. i - ṣiṣ - ṣi Is - tar ki - ma a - lit - ti
Spake Ishtar like a child,

(v. [illegible])
(v. ma - li - ti)
(v. *in fullness* (?)

9. u - nam - bi Rubat da - bat - ṣiv - va
uttered Rubat her speech:

10. mul -mu - ul - lu - u a - na di - id - di
All *to* *corruption*

lu - u i -tur va
are *turned,* *and*

11. sa a - na - ku ina ma- ḫar ili aq - bu - u
then I in the presence of the gods prophesied

limnuti
evil.

12. ki - i aq - bi ina ma - har ili
As I prophesied in the presence of the gods

limnuti
evil,

13. ana limnuti . . . . . uk nisi - ya qab- la
to evil were devoted all my people, and

aq - bi va
I prophesied

14. a - na - ku um - ma ul - la - da
I *the* *mother* *have* *begotten*

ni - su - ai va
my *people,* *and*

15. ki - i abli nuni u -ma- al - la -a
like the young of the fishes they fill

tam - ta - av - va
the sea.

16. ili su-par a-nun - na - ki ba -ku- u
The gods concerning the spirits were weeping

it - ti ya (v. sa)
with me (v. *her*),

17. ili ina subti as - bi i - na bi - ki - ti
the gods in seats seated in lamentation,

18. qat -ma sap - ta -su-nu . . . . . a - bu
covered with their lips for the

aḥ - re - e - ti
coming evil.

19. 6 ur - ra u mu - sa - a - ti
Six days and nights

20. il -lak sa-a - ru a - bu - bu mi- ḫu - u
passed, the wind, deluge, and storm,

- ṣap - pan -nu
overwhelmed.

21. si - bu - u im - mu i - na ka - sa - a - di
On the seventh day in its course,

[zunnu sa] - mu - ut su - u a - bu - bu gab - la
the rain from heaven, and all the deluge

22. sa im - taḫ - ẓu ki - ma ḫa - ai - al - ti
which had destroyed like an earthquake,

23. i - nu - uḫ a - ab - ba us - ḫa - ri - ir va
quieted. The sea he caused to dry, and

saru u lu a - bu - bu ik - la
the wind and deluge ended.

24. ap - pa - al - ṣa ta - ma - ta sa - kin
I perceived the sea making a

qu - lu
tossing;

25. u kul - lat te - ni - se - e - ti i - tu - ra
and the whole of mankind turned

a - na di - id di
to corruption.

26. ki -ma u - ri -bat pag- rat u -sal- lu
like reeds the corpses floated.

27. ap -te nap-pa-sa- av - va namaru im - ta -kut
I opened the window, and the light broke

eli dur - ap - pi - ya
over my face,

28. uk -tam-mi -iṣ va at - ta - sap a-bak- ki
it passed, I sat down and wept,

29. eli - dur - ap -pi- ya il - la - ka
over my face flowed

di -ma - ai
my tears.

30. ap -pa- li - iṣ kip - ra a - ti pa - tu
I perceived the shore at the boundary of

a - ab - ba
the sea,

31. a - na 12 ta -a- an i - te - la na - gu - u
for twelve measures the land rose.

32. a - na Ni - zir i - te - bil elappu
To the country of Nizir went the ship;

33. sad- u Ni- zir elappa iẓ-bat va a - na
the mountain of Nizir stopped the ship, and to

na - a - si ul id - din
pass over it it was not able.

34. edin im - mu sana immu sad - u
The first day, and the second day, the mountain of

Ni - zir kimin
Nizir the same.

35. sal - sa im - mu ri - ba - a im - mu sad - u
The third day, and the fourth day, the mountain of

Ni - zir kimin
Nizir the same.

36. ḥamsu sissa sad - u Ni - zir kimin
The fifth, and sixth, the mountain of Nizir the same.

37. ṣiba im-ma i - na ka - sa - di
On the seventh day in the course of it.

38. u -se- ẓi va ṣummatu u -vas- sar
I sent forth a dove and it left.

il - lik ṣummatu i - tu - rav - va
The dove went and turned, and

39. man-za- zu ul i -pa-as - suv -va iṣ - ṣiḥ - ra
a resting-place it could not enter, and it returned.

40. u -se- zi va ṣinuntu u -vas- sar
I sent forth a swallow and it left.

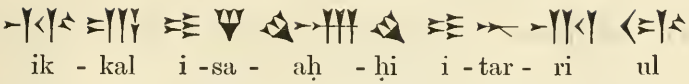
il - lik ṣinuntu i - tu - rav - va
The swallow went and turned, and

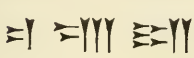
41. man-za- zu ul i -pa- as - suv -va iṣ - siḥ - ra
a resting-place it could not enter, and it returned.

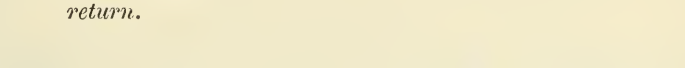
42. u -se- zi va a- ri - bi u -vas- sar
I sent forth a raven and it left.

43. il - lik a - ri - bi va qa - ru - ra sa
The raven went, and the corpses which were

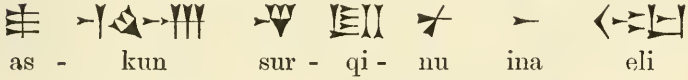
me i mur va
on the water it saw, and

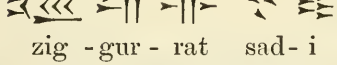
44. 
ik - kal i - sa - aḥ - ḥi i - tar - ri ul
it did eat, it swam, and wandered away, and did not

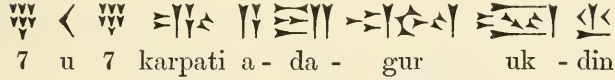

iṣ - ṣiḥ - ra
return.

45. 
u - se - zi va a - na 4 sari
I sent [the animals] forth to the four winds,

at - ta - ki ni - qa - a
I poured out a libation,

46. 
as - kun sur - qi - nu ina eli
I built an altar on the


zig - gur - rat sad - i
peak of the mountain,

47. 
7 u 7 karpati a - da - gur uk - din
by sevens jugs of wine (?) I took,

48.
i - na sap - li su - nu i - ta - bak
at the bottom of them I placed

qani qiras u simgar
reeds, pines, and spices.

49. ili i - zi - nu i - ri - sa ili
The gods collected at its burning, the gods

i - ẓi - nu i - ri - sa ḍabu
collected at its good burning;

50. ili ki - ma zu - um - be - e eli - in
the gods like flies over the

niqi ip - taḥ - ru
sacrifice gathered.

51. ul - tu ul - la - nu - uv - va Rubat
From of old also Rubat

ina ka - sa - di su
in her course

52. is - si numi rab - i sa A - nu
carried the great brightness which Anu

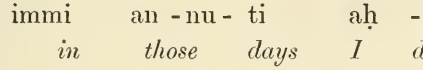
i - bu - su ki - i ẓu - ḥi . . . . .
had created. When the glory . . . . .

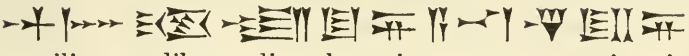
53. ili an - nu - ti lu - u abni ukni
those gods on the charm round

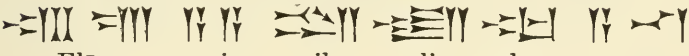
kisadi - ya ai am - si
my neck I would not leave;

Reverse—Column IV.

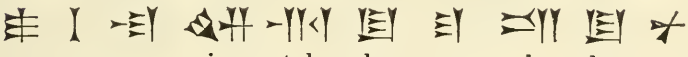
1.
immi an-nu-ti aḥ-ṣu-ṣa-av-va
in those days I desired that

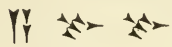

ana da-ris ai am-si
for ever I might not leave them.

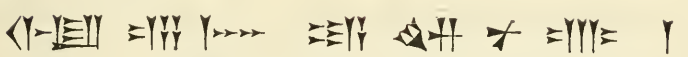
2. 
ili lil-li-ku-ni a-na sur-qi-ni
May the gods come to my altar,

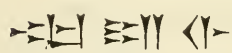
3. 
Elū ai il-li-ka a-na
may Elū not come to my

sur-qi-ni
altar,

4. 
as-su im-tal-ku va is-ku-nu
for he did not consider, and had made


a-bu-bu
a deluge,

5. 
u nisi-ya im-nu-u ana
and my people he had consigned to


ka-ra-si
the deep.

6. ul - tu ul - la - nu - uv - va Elū
From of old also Elū

ina ka - sa - di - su
in his course

7. i - mur elappa iẓ - te - bat Elū
saw the ship, and went Elū

lab - ba - ti im - ta - li sa ili
with anger filled to the gods

anunnaki
and spirits:

8. ai um - ma u - ẓi na - pis - ti ai
Let not anyone come out alive, let not

ib - luḍ nisu ina ka - ra - si
a man be saved from the deep.

9. Nin - ip pa - a - su epus va iqbi
Ninip his mouth opened, and spake

izakkar ana qu - ra - du Elū
and said to the warrior Elū:

10. man-nu- uv -va sala Hea a-ma- tu
Who then will ask Hea the matter

i - ban [-nu-u (?)]
he has done,

11. u Hea i - de - e - va
and Hea knowing also

ka - la -mi . . . . . .
all things . . . . . .

12. Hea pa - a -su ipusva iqabi
Hea his mouth opened and spake,

izakkar ana qu - ra - du Elū
and said to the warrior Elū:

13. at - ta rum - mi ili qu - ra . . . . . .
Thou just prince of the gods, warrior, ...

14. ki - i ki - i - la -tu ta - lik va a - bu - bu
when thou angry becomest, a deluge thou

tas - [kun]
makest;

15. be - el ḥi - ḍe - e - mid ḥi - ḍa - a-su be - el
the doer of sin does his sin, the doer

kil - la - ti e - mid kil - lat - [ṣu]
of evil does his evil.

16. ru - um - mi ai ib - ba - ti - ik su - du - tu
the just prince let him not be cut off, the faithful

ai . . . . . .
let him not [*be destroyed* (?)]

17. am - ma - ku (v. ki) [v. ki] tas - ku - nu a - bu - ba
Instead of thee making a deluge, may

nesu lit - ba - av - va nisi
lions increase and men

li - ẓa - aḫ - ḥi - ir
be reduced;

18. am - ma - ku tas - ku - nu a - bu - ba barbaru
instead of thee making a deluge, may leopards

lit - ba - av - va nisi li - ẓa [- aḫ - ḥi - ir]
increase and men be reduced;

19. am - ma - ku tas - ku - nu a - bu - ba
instead of thee making a deluge,

ḥu - ṣaḥ - ḥu lis - sa - kin - va mat lis .....
may a famine happen and the country be destroyed;

20. am - ma - ku tas - ku - nu a - bu - ba
instead of thee making a deluge,

dabara lit - ba - va - va nisi
may pestilence increase and men

(v.) (v. mati) lis - par ....
(v. *the country*) *be destroyed.*

21. a - na - ku ul ap - ta - a pi - sak - ti
I did not peer into the judgment

ili rabati
of the great gods.

22. Ad - ra - ḥa - ṣiṣ su - na - ta
Adrahasis a dream

u - sap - ri - suv - va pi - sak - ti
they sent, and the judgment of the

ili is - mi
gods he heard.

23. e - nin - na va me - lik su mil - ku
When his judgment was accomplished

i - lam -ma Elū ana lib - bi elappi
Elū went up to the midst of the ship.

24. iẓ -bat qa - ti - ya va ul - te - la - an - ni
He took my hand and raised

ya - a - si
me up,

25. us - te - li us - tak - mi - iṣ es - nis - ti
he caused to raise and to bring my wife

i - di - ya
to my side;

26. il - bu - ut bu - ut - ni va iz - za - az ina
he made a bond, he established in a

bi - ri - in - ni i - qar - ra - ban - na - si
covenant, and gave this blessing

27. i - na pa - na Ḥaṣiṣ - adra a - mi - lu - tum -ma
in the presence of Hasisadra and the people, thus:

28. e - nin - na va Ḥaṣiṣ - adra va amtu su
When Hasisadra, and his wife, and the

lu - u e - mu - u ki - ma ili na - si va
people, to be like the gods are carried away;

29. lu a - sib va Ḥaṣiṣ - adra ru - u - ki
then shall dwell Hasisadra in a remote place

ina pi - i nari
at the mouth of the rivers.

30. il - qu - in - ni va ina ru - u - ki
They took me, and in a remote place

ina pi nari us - te - si - bu - in - ni
at the mouth of the rivers they seated me.

31. e - nin - na va ana ka - a - sa man - nu ili
When to thee whom the gods

u - paḥ - ḥa - rak - kuv - va
have chosen thee also,

32. ba - la - ḍa sa tu - ba - hu - u
for the health which thou seekest

tu - ut - ta - a at - ta
and thou askest,

33. ga - na e - ta - at -pe 6 ur - ra u
this be done six days and

7 mu - sa - a - ti
seven nights,

34. ki -ma as - bu va ina bi - rid bu - ri - di -su
like sitting on the edge of his seat,

35. minu- tu ki -ma im - ba - ri i -nap - pu - us
the way like a storm shall be laid

eli su
upon him."

36. Ḥaṣiṣ - adra ana sa - si - va izakkar ana
Hasisadra to her also said to

mar - ḥi - ti - su
his wife,

37. am - ri idlu sa i - ri -su ba - la - ḍu
"I announce that the chief who grasps at health,

38. minu- tu ki - ma im - ba - ri
the way like a storm shall

- nap - pu - us eli - su
be laid upon him."

39. mar - ḥi - iṣ - ṣu ana sa su - va izakkar a - na
His wife to him also said to

Ḥaṣiṣ - adra ru - ki
Hasisadra the remote:

40. lu - bu - uṣ - ṣu va li - ik - kil - ta - a
"Purify him, and let the man be sent

nisa
away;

41. ḥar - ra - ni il - li - ka li - tur
the road that he came, may he return

ina sul - mi
in peace,

42. bab rabu u - ẓa - a li - tur a - na
the great gate open, and may he return to

ma - ti - su
his country."

43. Ḥaṣiṣ - adra ana sa si - va izakkar ana
Hasisadra to her also said to

mar - ḥi - ti su
his wife:

44. rag - ga - at a - mi - lut - tu
"The cry of a man

i - rak - gi - ik - ki
alarms thee,

45. ga - na e - pi - i ku - ru - um - ma - ti - su
this do his kurummat

si - tak - ka - ni ina ri - si - su
place on his head."

46. u im - mi sa it - ti - lu ina
And the day when he ascended the

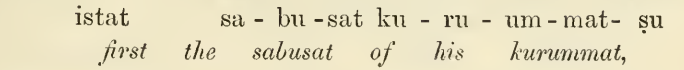
i - ga - ri elappi
side of the ship,

47. si - i e - pi ku - ru - um - ma - ti su
she did, his kurummat

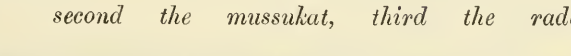
is - tak - ka - an ina ri - si - su
she placed on his head.

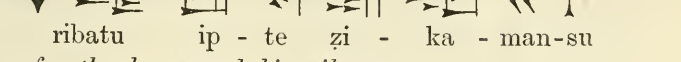
48. u im - mi sa it - ti - lu ina
And the day when he ascended the

i - ga - ri [elappi]
side of the ship,

49. 
istat sa - bu - sat ku - ru - um - mat- ṣu
first the sabusat of his kurummat,

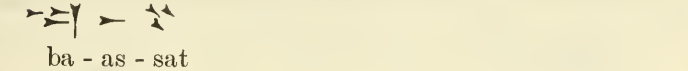
50.
sanatu mus - su - qat salsatu radbat
second the mussukat, third the radbat,

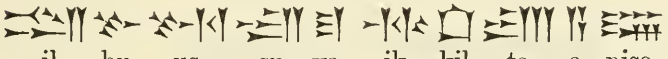

ribatu ip - te ẓi - ka - man-su
fourth she opened his zikaman,

51. 
ḥamsatu si - ba it - ta - di sissatu
fifth the cloak she placed, sixth

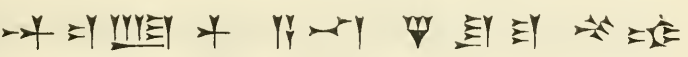
ba - as - sat
the bassat,

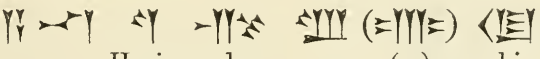
Column V.

1. 
ṣi - bu - tu ina pi - it - tiv - va
seventh in the opening she purified him and


il - bu - uṣ - ṣu va ik - kil- ta - a nisa
let the man go free.

---

2. 
Iz - ḍu - bar a - na sa - su - va izakkar
Izdubar to him also said


a - na Ḥaṣiṣ - adra ru - (u) - ki
to Hasisadra the remote

3. an - ni minu - minu - tu ir - ḥu - u
"this way was compassionate

e - li ya
over me,

4. ḥa - an - dis tal - lid - dan - ni va ta - ad - di - i
joyfully thou hast made me, and thou hast

ni at - ta
restored me."

5. Ḥaṣiṣ - adra a - na [sa - su - va] izakkara a - na
Hasisadra to him also said to

Iz - ḍu - bar
Izdubar:

6. . . . . mu - na - a
. . . . . .

ku - ru - um - mi - ti - ka
thy kurummit

7. . . . . lu e - dak - ka
. . . . . *separated*

ka - a - sa
thee,

8. [is - ta - at sa - bu - sat] ku - ru - um - mat - ka
. . . . . *thy kurummat,*

9. [sanatu mus - su - qat] salsatu rad - bat
second the mussukat, third the radbat,

10. [ribatu ip - te] ẓi ka - man - ka
fourth she opened the zikaman,

11. [ḥamsatu siba it - ta] - di sissitu ba - as - sat
fifth the cloak she placed, sixth the bassat,

12. si - bu - tu ina pi - it - tiv - va al - bu - ut - ka
seventh in the opening I purified thee and let thee

a - na - ku
go free."

13. . . . . izakkar a - na Ḥaṣiṣ - adra ru - ki
Izdubar after this manner also said to Hasisadra afar off :

14. . . . . Ḥaṣiṣ - adra ai ka (ni -) lil - lik
. . . . . *Hasisadra to thee may we not come,*

15. . . . . tu ik - ki - mu
. . . . . *collected*

16. . . . . a - sib mu [-u] - tu
. . . . . *dwelling in death,*

17. ..... iz kun - su u - mu - tuv - va
..... *his back (?) dies also.*"

---

18. Ḥaṣiṣ - adra [a - na sa - su - va izakkar] a - na
Hasisadra to him also said to

Ur - ḥamsi ma - la - ḥi
Urhamsi the boatman:

19. Ur - ḥamṣi ..... di - ka ni - bi - ru
"*Urhamsi ..... to thee we cross*

li - zir - ka
to preserve thee.

20. sa ina a ḥi sa ..... i ku - uḥ - sa
Who is beside the ..... of

ṣu - um - mi
support;

21. nis sa tal - la - ka pa- na - aṣ - ṣu
the man whom thou comest before,

ik - ta - ṣu - u ma- lu - u pa-gar su
disease has filled his body;

22. mas - ku - u uk - ta - at - tu - u
illness has destroyed the

du -muq seri - su
strength of his limbs.

23. li - ki su-va Ur -ḥamsi ana nam - ṣė - e
Carry him Urhamsi, to be cleansed

bil - su- va
take him,

24. ma - li - su ina me - e (v. me) kima
his disease in the water to beauty

el - li lim - ṣi
may it be cleansed,

25. lid - di mas- ki - su-va li - bil tam- tu
may he cast off his illness, and the sea carry it away,

da - a - bu lu -za- bu zu - mur su
may health cover his skin,

26. lu - u -ud-du - us (v. su) bar (v. par) ṣi - gu
may it restore the hair (?)

(v. gi) sa qaq - qa - di -su
of his head,

27. te - di - ki lu (- u) - la - bis ẓu - bat
the vail may it cover the cloak

pal - ti - su
of his body.

28. a- di il - la - ku a- na (v. ana) ali (v. mati)
That he may go to his country,

su a - di i - kas - sa - du ana ur - ḥi - su
that he may take his road,

29. te - di - qu si - pa ai id - di va
the vail cloth may he not cast off, but alone

e - di - su li - dis
may he leave."

30. il - ki - su va Ur - ḥamsi ana nam - ṣe - e
Urhamsi carried him, to be cleansed

u - bil - su - va
he took him,

31. ma - li su ina me kima el - li
his disease in the water to beauty

im - ṣi
as cleansed,

32. i - di maski - su - va u - bil tam - tu
he cast off his illness, and the sea carried it away.

da - a - bu iz - za - pi zu - mur - su
and health covered his skin.

33. u - te - ed - [di - is bar - ṣi - gu sa]
he restored the hair (?) of

qaqqadi su te - di - qa la - bis ẓu - bat
his head, the vail (?) covering the cloak

pal - ti su
of his body.

34. . . . . a - di i - kas - sa - du ana ur - ḥi - su
That he might go to his country, that he might take his road,

35. . . . . li - dis
the vail cloth he did not cast off, but alone he left.

36. Iz - ḍu - bar u Ur - ḥamsi ir - ka - bu
Izdubar and Urhamsi rode in the

elappi
ship,

37. [sa id-] du - u - su - nu ir - tak - bu
where they placed them they rode.

38. mar - ḥi - iṣ - ṣu ana sa - su - va izakkar a - na
His wife to him also said to

Ḥaṣiṣ - adra ru - ki
Hasisadra the remote:

39. Iz - ḍu - bar illaka i - na - ḥa i - su - ḍa
"Izdubar goes away, he is satisfied, he performs

40. me - na ta - at - ta - dan - na - va
that which thou hast given him, and

i - ta - ar ana mati su
returns to his country."

41. u su - u is - si pa - ri - ṣa
And he carried away the breaches of

Iz - ḍu - bar
Izdubar,

42. elappu uḍ- ḍe - eḥ - ḥa - a a - na kip - ri
and the ship touched the shore.

43. Ḥaṣiṣ - adra ana sa - su - va [izakkar a - na]
Hasisadra to him also said to

Iz - ḍu - bar
Izdubar:

44. Iz - ḍu - bar tal - li - ka tan - na - ḥa
"*Izdubar thou goest away, thou art satisfied, thou*

ta - su - ḍa
performest

45. me - na - a ad - dan - nak - kuv - va
that which I have given thee, and

ta - ta - ar ana mati - ka
thou returnest to thy country.

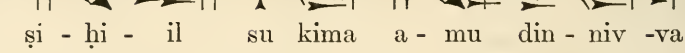
46. lu - ub - te Iz - ḍu - bar a - mat
Be revealed to thee Izdubar the

ni - ẓir - ti
concealed story;

47 . . . . . uq - bi ka
and the judgment of the gods be related to thee."

48. u - sum su - u ki - ma id - di - id ina
This account like bitumen

. . . . . sa - ri
. . . . . .

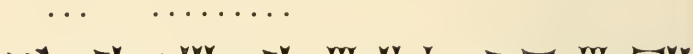
49. 

ṣi - ḥi - il su kima a - mu din - niv -va

its renown like the sight of .....

u .....

... .

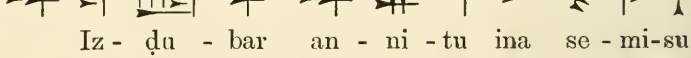
50. 

sum - ma sam - ma sa - a - su i - kas - sa - da

when the account a hand

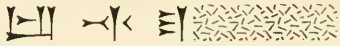
qa - ta - a .....

shall take .....

51. 

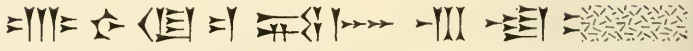
Iz - ḍu - bar an - ni - tu ina se - mi-su

Izdubar, this in his hearing



ip - ti - va .....

heard, and .....

52. 

u - rak- ki - iṣ abni kap - tu .....

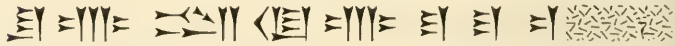
he collected great stones .....

Column VI.

1.

il - du - du su va ana zu .....

they dragged it and to .....

2. 

su - u il - ki u - ma - ma iz .....

he carried the account ....

3. u -bat- ti - iq abni kap - tu .....
carved the great stones .....

4. ana imiri iṣ - ṣu - bi - su .....
to his mule .....

5. Iz - ḍu - bar a - na sa su - va izakkara
Izdubar to him also said

[a - na Ur - ḥamsi]
[*to Urhamsi*]

6. Ur -ḥamsi sam - mu an - nu - u .....
" *Urhamsi, this account* .....

7. sa nisu ina lib - bi su i -kas - sa - [du] .....
If a man in his heart take .....

8. lu - bil - su ana lib - bi Uruk
may they bring him to the midst of Erech

ṣu - bu - [ri]
Suburi

9. il - sa si - i - bu iz .....
he made (?) *a speech* .....

10. a - na - ka lu - sum - ma lu - tur a .....
I will give an account and turn to .....

ẓi - il .....

11. a - na 10 kas - pu ik - ṣu - pu ku - ṣa - pu
For 10 *kaspu* (70 *miles*) *they journeyed the stage,*

ana 20 kas - pu .....
for 20 *kaspu* (140 *miles*) *they journeyed the stage.*

12. i - mur - va pu - (u) - ra Iz - ḍu - bar
and Izdubar saw the

tu .....
well .....

13. ultu (?) 13 (?) kas - pu a - na lib - bi ....
For 13 *kaspu* (91 *miles*) *to the midst of Erech Suburi.*

14. zir - i - te .... nis .....
noble of men .....

15. ina (?) ta - ri - su di .....
in his return .....

16. . . . li - mi Iz - [ḍu - bar] . . . . . .
. . . . *Izdubar approached* . . . . . .

17. eli dur - ap - pi - su illika di -ma [-ai] . .
and over his face coursed his tears,

[va izakkara ana Urḥamsi]
and he said to Urhamsi:

18. a - na man- ni - ya Ur - ḥamsi i - na
"For what to me in my

ḥa - i - da - ai . . . . . .
turning, ...

19. a - na man - ni - ya i - ba . . . . lib - bi - ya
for what to me is my heart troubled.

20. ul as - kun dum - qa ana (v. a - na)
I have not done good to

ram - ni - ya
my own self;

21. u nesu sa qaq - qa - ri du - un
and the lion of the earth

(v.) (dum) - ki i - te - bu - us
does good.

22. e - nin - na a - na (v. ana) 20 kas - pu
Then for 20 *kaspu* (140 *miles*)

e -du (?) - u (?) - na - as - sav - va
first (?) *I* *went* (?) *and*

23. da - a - da ki - i ab - tu - u
the cabin (?) *then* *I* *opened* *and*

[at] - ta - bak u - nu - tu
I *placed* *the* *instrument,*

24. tam- ta ai i - ta - sa sa ki - i
the *sea* *not* *to* *its* *wall* *then*

a - na (?) - ku lu aḥ - ḥi - iṣ
could *I* *get.*"

25. u elappi e - te - zib ina kip - ri ana 20 kas - pu
And the ship they left by the shore, 20 *kaspu*

ik - ṣu - pu ku - ṣa - pa
(140 *miles*) *they journeyed the stage.*

26. ana 30 kas - pu is - ku - nu nu - bat - ta
For 30 *kaspu* (210 *miles*) *they made the ascent,*

ik - su - du - uv - va ana lib bi Uruk
they came to the midst of Erech

su - bu - ri
Suburi.

---

27. Iz - ḍu - bar ana sa - su - va izakkara a - na
Izdubar also said to him

Ur - hamsi ma - la - ḥi
Urhamsi the boatman:

28. e - li va Ur - ḥamsi ina eli dur
"Ascend Urhamsi over where the wall

sa Uruk i - tal - lak
of Erech will go;

29. te - mi - in - na bir - di libni
the cylinders are scattered. the bricks

ẓu - ub - bi - su - va ana (?) mati (?) su la
of its interior also for its mass are not

a - gur - rat
made,

30. u us - si su la id - du - u sa
and its foundation is not laid to

zik - ri ki (?)
thy height;

31. 1 ... ir - ki 1 ... kiri 1
1 *measure the circuit of the city,* 1 *measure of plantations,* 1

... iṣ - ṣu Na - an - tur (?) (?) (?)
measure the boundary of the temple of Nantur

Bit Is - tar
the house of Ishtar,

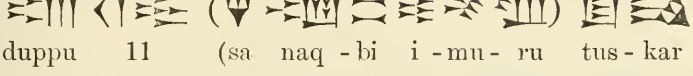
32. 3 ... u bit - ru uruk ut .. ḫu
3 *measures together the divisions of Erech* .....

First Line of next Tablet—

33. tam - ma - bu - uk - ku ina bit nisi - gur
the tammabukku in the house of the gur

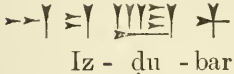
lu (-u) - e - zib
was left

Number of Tablet in series—

34. 

duppu 11 (sa naq - bi i - mu - ru tus - kar

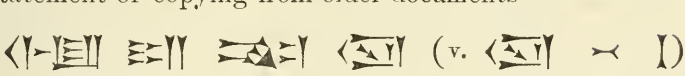
11*th tablet* (*of "the fountain he had seen,*) *the hero*



Iz - ḍu - bar

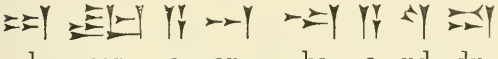
Izdubar."

Statement of copying from older documents—

35. 

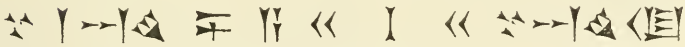
labira su kima (v. kima labiri su)

its old copy like (v. *like its old copy*)



ab - sar - a - an ba - a - ud - du

written and made clear

36. 

mat Assur - bani-pal sar kissati sar Assuri

country of Assurbanipal king of nations king of Assyria.

Notes.

Line 1. Izḍubar. I have already stated that this name is only provisional. I am of opinion that the name was Nimrod, but at present cannot prove it. The Cuneiform characters of the name [illegible] resolve themselves into two parts, [illegible] meaning fire or flame, and [illegible] probably meaning a staff or holder, and I conjecture that the meaning of the group is the torch or firebrand. The phonetic reading of the first group [illegible] is unknown, but it certainly ended in *r*, as in Cuneif. Ins., Vol. II. p. 18, line 11, where it doubles its last letter and adds *a*, we get [illegible] *ra* as its addition [illegible]. Perhaps this word was Namur, allied to the Chaldee נור ignis. Dan. 7, 9. In Assyrian, words with weak middle radicals often have a second form, in which the vowel changes into or adds *m*. Thus we have both [illegible] ḥa-mi-ri and [illegible] ḥa-ai-ru for "husband," and [illegible] na-ma-ri and [illegible] na-h-a-ru for "dawn or morning." The second element in Izdubar [illegible] has the sound *du*. So far as the sound of the name [illegible] can be conjectured from these grounds, it would be....radu, and as this part contains the two last consonants of Nimrod, it is possible it should be completed Namuradu. The character of this king and hero is, however, not so doubtful as his name. He is called [illegible] bu-mas-la e-mu-ki, "the powerful giant," or "the powerful leader," and [illegible] "the giant king."

[illegible] I have translated this previously "after this manner (also)," but I have since ascertained that [illegible] sasu is the pronoun "him," and it regularly changes into the feminine in every case where a female is addressed, the feminine being [illegible]: thus when Izdubar speaks to Hasisadra we have [illegible] a-na sa-su-va, "to him also"; but when Hasisadra speaks to his wife, Col. IV, lines 36 and 43, we have [illegible] a-na sa-si-va "to her also."

The pronouns of the third person singular in Assyrian will thus be :—

Nom. mas. su-u *he;* fem. si-i *she.*

Dative mas. sa-su *him;* fem. sa-si *her.*

Accu. initial m. sa-a-su *him;* fem. sa-a-sa and sa-a-si *her.*

Acc. and genitive after verb or noun mas. su *him* or *his;* fem. sa and si *her.*

Line 3. mi-na-tu, "number" or account, is here used for "why." It is commonly so used in questions, especially in the Izdubar legends. This line is literally "why of thee not repeatest to me also thou." The nominative in these texts generally stands at the close of the line or phrase.

Line 5. The commencement of this line is broken and doubtful.

Line 11. Su-ri-ip-pak, and in line 20 Sur-ri-ip-pa-ku-u, "Surippakite," this city, which must at one time have been on the shore of the Persian Gulf. It appears by this legend that Surippak was considered to have been the city of Hasisadra, and his father Ubara-tutu, and the city of the ark. This city is the one mentioned in Cuneif. Ins., Vol. II, page 46, line 1, where the lithograph copy is defective, it is Su-rip-pak-tu, a "Surippak ship." Here the monogram for the place is "the ship city," a name evidently derived from the tradition that the ark was made there. In an ancient geographical list belonging to the early Chaldean period, the city bears the same name, and again in an inscription of Hammurabi, who captured the city and added it to his empire. These notices show the extreme antiquity of the legend of the Flood attached to this city. The god of Surippak is called, Cuneif. Ins., Vol. II, p. 60, line 21, "the god of the deluge," Hea, king of Surippak.

Line 15. [illegible]. I have previously supposed that this god bore the name of Bel, but in the bilingual K 2870, I find it written phonetically twice as [illegible] E-lū in Akkad, and [illegible] Kap-tū in Semitic, without the determinative of divinity. On an amulet in the British Museum occurs the phonetic name of another of these divinities. [illegible] the wife of Anu, written [illegible] A-na-tū in the passage [illegible] "Anatu lady of death and life."

Lines 17 to 19. Broken and doubtful.

Line 20. Ubaratutu. In addition to my former notes on this name, I must call attention to K 2107, where [illegible] appears as the god of generation, the phrase is

[illegible]

Tu - tu mu - al - lid ili mu - ud - di - is

Tutu generator of the gods, restorer

[illegible]

ili

of the gods.

Line 22. Doubtful.

Lines 25 and 26. Numbers of cubits very doubtful.

Line 31. The reading, "sons of the people" or "young men," was suggested to me for the passage in Col. II, line 29, by Mr. Fox Talbot. See also his identification of sibutu as grandfather. F. Talbot's Assyrian Glossary.

Lines 35 and 36. I am uncertain if there is anything lost between these lines.

Line 45. Here Adrahasis is spoken of in the third person, as in Col. IV, line 22; these passages are not in accordance with the rest of the inscription.

Lines 51 and 52. It is possible that some matter is lost between these two lines.

Column II, line 10. [illegible]. This appears to be a measure. I find the character is a variant of [illegible].

Line 12. [illegible], sometimes [illegible], appears to be a box, bag, or enclosure, and is equivalent to [illegible] bis-sa-tu.

In Cuneif. Ins., Vol. II, p. 25, No. 2, we have the names of several kinds of boxes or bags, and in line 29 da-lat bis-sa-ti "door (or lid) of box." This will give us a better reading of the passage, almost always found at the end of cylinders which were buried in receptacles in the walls and foundations of Assyrian buildings, bissati lab-su-us, "in a receptacle may he enclose it." In Cuneif. Ins., Vol. II, p. 44, No. 8, there is a curious series of equivalents connected with this word: we have ṣu-lu-ku, equal to lu-ub-bu "interior or enclosed," and in line 69 "enclosed in a box" is given as the equivalent of nu-u-ḥu. This will give us a new meaning for the name Noah and perhaps the derivation of the word.

Line 17. Karan "wine." On a tablet I found at Kouyunjik we have equal to karpat kara[ni] "jug of wine," and a few lines under it a curious combination equal to kar-pat si-na-a-ti answering to our "chamber utensil." For the meaning of sinatu see my syllabary p. 5.

Line 19. Doubtful passage.

Line 23. Damaged and doubtful.

Line 24. si-ni-pat, two-thirds. See Lion weights, Cuneif. Ins., Vol II, p. 15, line 44, and Vol. III, p. 70, line 3, and Zeitschrift für Agyptische Sprache, September, 1872.

Lines 31 and 34. damaged in both cases; text and translation conjectural.

Line 35. Meaning doubtful.

Line 36. i-tab-lu-ṣi, from the same root as the words appalṣa in Col. III, line 24, and appaliṣ in Col. III, line 30. I have found several other forms, including nap-lu-si, K 2870; the root means to watch, observe, perceive, &c.

Line 38. 𒁹𒁹𒁹 𒁹𒁹𒁹 malaḥ is composed of the two signs 𒁹𒁹𒁹, a ship, which is given 𒁹 𒁹 *ma-a* in Cuneif. Ins., Vol. II, p. 2, Syllabary 280, and 𒁹𒁹𒁹, to "propel," or "make go," given as 𒁹 𒁹𒁹𒁹 la-aḥ in Cuneif. Ins., p. 48. Col. II, line 62, the phonetic reading of the two signs thus being *ma-laḥ*. With the determinative 𒁹𒁹𒁹, meaning "man," the word means "sailor," or "boatman," he who propels the ship. The word occurs in several places in its phonetic form 𒁹 𒁹 𒁹 ma-la-hi, it is given in a fragment of a list 𒁹𒁹𒁹 𒁹𒁹𒁹 . 𒁹 𒁹 𒁹 ma-la-hu, "boatman," and in a list of woods 𒁹 𒁹 𒁹𒁹𒁹 𒁹𒁹𒁹 . 𒁹 𒁹 𒁹 [kuṣṣu] sa ma-la-[ḥi] "bench of a rower."

Column III, line 8. The first copy I found had 𒁹 𒁹𒁹𒁹 𒁹 ma-li-ti, "full," probably an error, but I subsequently found one with the clearer reading 𒁹 𒁹 𒁹 𒁹 𒁹 ki-ma a-lit-ti, "like a child."

Line 9. 𒁹𒁹 𒁹𒁹𒁹. This goddess I believe to be the 𒁹𒁹𒁹 𒁹𒁹 𒁹 Ru-ba-ti who is called "lady of the gods" in K 72.

Line 16. Here the writer has inserted two words at the end, one over the other, 𒁹𒁹𒁹 ya, "me," and 𒁹 sa, "her," the last is probably the right one.

Line 19. Here for . . . . *mut-sū* one copy inserts 𒁹 𒁹 𒁹 𒁹𒁹𒁹 𒁹 𒁹 𒁹 𒁹𒁹𒁹 ik-ta-sal mi-ḥu-u.

Line 27. 𒁹𒁹𒁹 𒁹𒁹 𒁹 dur-ap-pi would be the tower or circuit of the nose. It is used here with the meaning "cheeks" or "face."

Line 30. 𒁹 𒁹𒁹 𒁹 𒁹 kip-ra-a-ti. The use of kipru in these tablets shows that its meaning must be "shore," or "boundary," and not "tribe," or "race," as we have before supposed.

Line 34. 𒁹𒁹𒁹 is most probably compounded of *ki*, "with," or "like," and 𒁹 "ditto." The reading of 𒁹 appears to be min, see Cuneif. Ins., Vol. II, p. 4, 688, where we should read 𒁹 𒁹 𒁹 𒁹, there being a variant in S. 15

i-min-na-bi meaning *i* = *i*, men = twice, and nabi pronounced "*i* twice pronounced."

Line 38. the love bird, the dove or turtle phonetically in genitive ṣu-um-ma-ti. I conjecture that the Arabic حمامة hamāmat "pigeon" is derived from the same root, the ṣ being softened to h. Another Assyrian name is e-ri-bu, Heb. ארבה dovecote. Isa. 60, 8.

Line 40. , phonetically Ṣi-nun-tu, swallow. Heb. Castelli סנונית Hirundo.

Line 42. a-ri-bi, "raven." See Cuneif. Ins., Vol. II, p. 37, line 3.

Line 46. sur-qi-nu: very doubtful word, I conjecturally read "altar."

Line 47. phonetically kar-pat "a jug." The meaning of this word was discovered by Mr. Fox Talbot. The signs probably indicate some wine or drink offered as a libation.

Line 48. qiras "pine" here probably indicates sticks or logs of wood; indicates "spice" or "incense." I do not know its phonetic value.

Line 50. zu-um-be-e, plural of zumbu, "fly"; see Delitzsch Assyrische studien, p. 63. The identifications of Dr. Delitzsch are generally excellent, but in p. 63, zu-um-bi ne-e-si should be "lion fly," being equated with in S. 954 and zumbi sai in p. 64 should be zu-um-bi me-e, "the water fly." Here the lithograph copy of Cuneif. Ins., p. 5, is in error, being inserted instead of .

Line 52 to Col. IV, line 1. Difficult passage. I give a new version, but the whole passage is obscure; is the monogram for zumbu, "fly," but I cannot venture to translate it so here.

Line 5. ka-ra-si. This word primarily means "stomach," then "bag" or "baggage," and metaphorically "the mind," Assurbanipal p. 11. In this passage I have translated "the deep," but there is no proof for this reading; it may be "a net."

Line 7. After ship, translation doubtful. It may be "went Bel, in heart he pondered of the gods and spirits."

Line 10. I have now given a better translation of this line, but it is rather obscure still.

Line 11. Perhaps better, "And Hea had knowledge and all . . . . ." probably i-de-e is the permansive.

Line 13. is literally just prince. Among other passages there is one bearing on this in the tablet, with warnings to kings against injustice.

Line 10.

di - na a - ḥa - av ina mati su isakan

Another judge in his country shall place,

va rum -mi u dain -mi ana di - niv - la -mi-mi

and a just prince and just judge instead of unjust judges.

Here we see the contrast between just and unjust. The double is only the sign of the plural.

Line 14. ki-i-la-tu, form of kila "adverse" or "against." This word appears to be derived from ki "with" and la "not." See Norris's dictionary, p. 599.

Line 16. Rum-mi I derive from rub-mi. The division of the words in this line is uncertain.

Line 17. "instead of." I have no other examples of this word, but I believe it to be a form of am-ma-te "the other or the opposite." see "opposite bank" in Cuneif. Ins., Vol. II, p. 24, line 50. and Vol. III. p. 8, line 36.

Line 20. . From a number of notices I believe this indicates pestilence, but I have no direct reading or proof.

Line 22. su-na-ta "dream." Generally in this word the *n* disappears, being replaced by the doubling of the *t;* but we have both sunatu and suttu in use, just as we have sanatu and sattu for year. This line is in the third person, it reads like a gloss on the original narrative.

Line 24. es-nis-ti "woman." I am still in doubt about the phonetic reading of the first character, but the value of the second is shown by the example in Cuneif. Ins., Vol. III, p. 53, line 30 es-ni-sa-at.

Line 26. bu-uḍ-ni, I now read "a bond," but I have no direct proof of this meaning.

Line 33. ga-na, meaning unknown; the verb here is from the same root as the imperative in line 45 and the form in line 47 . I do not know its meaning. I conjecturally translate "do," but it is more probably "cover," "conceal," or "protect," only I cannot make these meanings fit the sense of the passages.

Line 34. Doubtful. My present translation is, however, very probable. is, I find, some part of the body.

Lines 49 to Col. VI, 1. The things here enumerated were probably parts of the clothing of Izdubar, but my translation of the whole is conjectural.

Line 21. ma-lu-u and mali, in lines 24 and 31, evidently mean some illness.

Line 22. mas-ku-u (derived from the word for skin) has a similar meaning. See lines 25 and 33.

Line 26. bar-ṣi-gu: var. par-ṣi-gi. My translation here is conjectural.

Line 27. te-di-ki, line 29 te-di-qu. I read "veil," but with some doubt.

Line 35. I cannot understand the form li-dis in this line. I should have expected e-dis.

Col. VI, lines 6 to 16. Defective and doubtful; it is better to leave the discussion of these lines until the text is more complete.

Line 19. << man-ni, I take from << "who," and read "what."

Lines 22 to 24. Text mutilated and meaning uncertain.

Lines 31 and 32. Damaged and doubtful.

Line 33. Heading of next tablet tam-ma-bu-uk-ku. This is the animal which had killed Heabani, the servant of Izdubar. I have, however, no clue to its nature, it is probably some poisonous fly or insect.

Line 34. ku-gar perhaps tus-kar. Unknown word. I conjecturally read "hero," but it is only a guess.

SOCIETY OF BIBLICAL ARCHÆOLOGY.

CONDENSED REPORT OF THE PROCEEDINGS DURING THE THIRD SESSION, NOVEMBER, 1873, TO JULY, 1874.

Tuesday, November 4, 1873.

SIR HENRY RAWLINSON, K.C.B., Vice-President, in the Chair.

The following candidates were nominated for election:—Rev. G. C. Geldart; Rev. W. D. Parish; Rev. Dr. Stuart Robinson (*Kentucky*).

The following papers were read:—

1. *On Fragments of an Inscription giving part of the Chronology from which the Canon of Berosus was copied.* By Geo. Smith.—Mr. Smith commenced by describing the fragments of the tablet, which he believed to belong to the seventh century B.C. He then gave an account of the kings on the new tablet, and some others recently discovered. These monarchs included several belonging to the mythical period, and others of the historical. Among these were Sabu, who founded the temples of Sippara, Mili-sihu, and Merodach Baladan I, his son, who reigned in the fourteenth century B.C.; Simmas-sihu and his six successors, who reigned in the eleventh century B.C. The positions of the various monarchs and their reigns were discussed, and attention was drawn to the short average of the reigns in the best preserved fragment, seven kings only occupying forty-nine years and three months.

2. *On a New Fragment of the Assyrian Canon belonging to the Reigns of Tiglath-Pileser and Shalmaneser.* By Geo. Smith.—The account of a fragment of the Assyrian historical canon followed. This fragment belonged to an important epoch about which there has hitherto been very little information, viz. the period from B.C. 732 to 722, including the reign of Shalmaneser IV. The new fragment showed that there was no break or irregularity in the succession of the Assyrian eponymes at that period, and proves the accession of Shalmaneser to have been in B.C. 727, a fact previously doubted by some scholars. The bearing of the new fragment on various Biblical dates and statements was gone into, the author being of opinion that this fragment, in conjunction with some other Assyrian inscriptions, tended to materially confirm the accepted Biblical Chronology.

Tuesday, December 2, 1873.

S. BIRCH, LL.D., President, in the Chair.

The following candidates were duly elected Members of the Society:—Rev. Prof. Campbell (Montreal); Rev. Dr. Douglas (Glasgow); Capt. E. Dumergue; Prof. T. Hayter Lewis, F.R.I.B.A.; Albert J. Mott; Alexander Peckover, F.R.G.S.

The following papers were read:—

1. *The Future Punishment of the Wicked, a Doctrine of the Assyrian Religion.* By H. Fox Talbot, F.R.S.—In this sequel to the learned author's former papers, he tried to prove from his "Legend of the Descent of Ishtar to Hades," especially lines 32–6, "of the lighting up of consuming flames to envelop the abusers of the

conjugal tie," that torments for the wicked in the world after life must have been doctrinally taught in the Assyrian religion: which position he illustrated by many grammatical and archæological notes.

2. *Notes from Borneo, illustrative of Passages in Genesis.* By A. M. Cameron, Esq.—In this paper the author cited a Dyak tradition, that at an archaic general inundation, the ancestors of the Chinese, Malay, and Dyak had to swim for their lives; and (possibly foisted on this tradition) the Dyak preserved his weapons, and the Chinaman his books. A second tradition stated than an ancestral Dyak made a ladder to go up to heaven, but unhappily one night a worm ate into the foot of the ladder and brought it all down. Mr. Cameron further stated that one of the two Dyak names for the Supreme Being was YAOUAH. He drew attention to the similarly sounding names JEHOVAH, and YAHVEH, of the Bible.

Tuesday, January 6, 1874.

S. BIRCH, LL.D., President, in the Chair.

The following candidates were duly elected Members of the Society:—Rev. Robert Clerk Burton, M.A.; Rev. W. R. Blackett, M.A.; Rev. W. H. Boscawen, M.A.; Lady Burton; C. Harwood Clarke; Rev. William David, M.A.; Rev. William Denton, M.A.; E. L. Garbett, F.R.A.S.; Mrs. Kinloch; Rev. T. L. Kingsbury, M.A.; Miss Moberly; Rev. Dr. Manning (*Tract Society*); Rev. G. E. Phillips; Rev. Archer Thompson, M.A.; William Henry Brown; Rev. J. Wordsworth, M.A.

The following papers were then read:—

1. *The Sallier, Papyrus containing the Wars of Rameses Meriamun with the Khita (Hittites).* Translated, with annotations, by Professor Lushington.—This well known text was supplemented by a fragment from the Raifet Collection; it contains perhaps the most vivid picture of a pre-Homeric battle extant: the king himself, the chief actor, frequently speaking in the first person. The two finest passages, the prayer of Rameses to his father Amun, and the defeat of the Hittites, possessing peculiar beauty, in addition to the interest attaching itself to a people who were hereafter so troublesome to the Jewish nation, and who about 1200 B.C. were formidable enemies to the Egyptians themselves. The value of the translation was enhanced by many philological notes.

2. *On some Illustrations of the Book of Daniel from the Assyrian Inscriptions.* By H. Fox Talbot, F.R.S.—In this paper the learned Assyriologist produced corroborative evidence from the Annals of Assurbanipal of the extreme forms of punishment by a Fiery Furnace and the Lions' Den, as related by Daniel, the Assyrian monarch stating that having conquered his brother Saulmugina he executed him by throwing him into a burning fiery furnace, together with many of his adherents. The date of this event was about the seventh century B.C.

Tuesday, February 3, 1874.

SIR HENRY RAWLINSON, K.C.B., in the Chair.

The following candidates were duly elected Members of the Society:—William Bugby; Henry Fell Pease (*Darlington*); William Turnbull Pilter.

After some introductory observations by the Chairman on the generally unscientific character of the Assyrian Astronomy, upon which, however, much of the mediæval astrology was based, the following paper was read for the author by Mr. R. Cull:—

On the Astronomy of the Assyrians, with translations from the Cuneiform Inscriptions. By Rev. A. H. Sayce, M.A.—After a review of the references

found in classical authors to Babylonian astronomy and astrology, a translation was given of the Catalogue of the astronomical works in the Library of Sargon of Agane, and the Chaldean Calendar and its formation, were discussed. The Chaldean Calendar was shown to be closely connected with the Signs of the Zodiac. Next followed an account of the names given to the planets by the Babylonians, the order in which they were arranged, and the origin of the week. Translations were then given of the records of eclipses, the conjunctions of the sun, moon, and planets, the rising and setting of the stars, and other heavenly phenomena, together with the observatory reports sent in from Nineveh, Arbela, and Assur. A long appendix contained interlinear translations, with philological notes, of the portions of the great astrological work published in the 3rd Vol. of the Cuneiform Inscriptions of Western Asia.

Tuesday, March 3, 1874.

S. Birch, LL.D., President, in the Chair.

The following candidates were duly elected Members of the Society:—Rev. Charles Bowden, (*Oratory*); Rev. J. A. Paine; Miss Mary E. Rogers.

The following papers were then read:—

1. *Translation of an Egyptian Fabulous Romance, "The Tale of the Doomed Prince." From the Harris Papyri.* By C. W. Goodwin, M.A.—This curious Romance, which is unfortunately only a fragment, relates how a certain Egyptian King, in answer to his earnest prayers, obtained a son, of whom the Seven Athors (Parcæ) foretold that he would die by one of three deaths, either by a Crocodile, a Serpent, or a Dog. To preserve his son, the king shut him up in a tower with every luxury, and numerous attendants, who were charged to tell him nothing of the existence of those three animals. One day the prince saw an Egyptian go forth to hunt, accompanied by his Dog, whereupon he desired to have such an animal. This led to the disclosure of his destiny; but he worried his father into letting him have his way, saying "it is useless to fly from fate." After that he also prevailed upon the king to let him go out and see the world. Agreeably to this wish he travelled alone to Naharanna (Mesopotamia), and passed as the son of an Egyptian horseman fleeing from the cruelty of a stepmother. Arrived at the court of the monarch of the country, he mingled with the courtiers, by whom he was told of the singular circumstances which surrounded the king's daughter, who was shut up in a tower, from whence she could only be liberated by that lover who should successfully scale the window of her prison. All the princes of Naharanna had tried to do this, and failed; but the young Egyptian, whose personal appearance won the heart of the princess, was successful. Upon this the king her father refused to give her in marriage to an unknown fugitive; but as she threatened suicide in the event of being contradicted, he consented, and the lovers were united. Soon after the prince and his wife returned to Egypt on a tour, and on entering one of the temples to worship, the prince was attacked by a sacred Crocodile, which he repelled, and also by a Giant, whom he overcame. Weary with his exertions, the prince returned home to rest, while his wife watched beside him. Presently a Serpent came out of a hole to sting him during his sleep; but the princess offered the reptile some intoxicating drink, and when it was drunken, drowned the creature in her bath. On the prince awaking, he and his wife offered prayers and thanks for his deliverance from two of the foretold dooms. He then went out for a walk, and was again met by the Giant and Crocodile, who warned him of his certain fate, to which he paid no heed. Two months afterwards the prince again walks out, taking his Dog with him; but at this crisis the romance is suddenly broken off by the loss of the remainder of the papyrus. The learned translator drew attention to the peculiar features of this ancient story, resembling in so many points the romances of the mediæval period, which may have had a common origin.

2. *Translation of an Historical Narrative belonging to the Reign of Thothmes III.* By C. W. Goodwin, M.A.—This translation, the original text of which is also contained in the Harris Papyri, related the manner in which a certain chief officer of state, named Tahutia (*Thoth*), treacherously delivered up the fortress of the Imu (a people hitherto unknown to Egyptologists) to the armies of King Men-cheper-ra (Thothmes III), and enumerated further the amount of the spoil thus surrendered, and the rewards obtained by the traitor.

Observations upon the Assyrian Verbs Basu and Qabah. By Prof. William Wright.—This paper consisted of a critical analysis of the roots of the above verbs, and their cognate analogues in other Semitic languages.

Tuesday, April 7, 1874.

S. Birch, LL.D., President, in the Chair.

The following Candidates were duly elected Members of the Society:—Percy Read; J. Winter Jones; Jonathan Peckover; and Henry Danby Seymour.

The following papers were then read:—

1. *On Four Songs contained in an Egyptian Papyrus in the British Museum.* Translated, with notes, by C. W. Goodwin, M.A.—Of these four songs three partook of the same nature, and were amatory compositions, written in a highly imaginative and poetical style with much voluptuousness of expression, having a very striking resemblance, extending throughout whole passages, to the language of the Canticles. Structurally the verses possess both rhythm and alliterative construction, with regular pauses or strophes. The first song is unfortunately in a very fragmentary condition, and is, besides, imperfect at the beginning and the end. In the second song these marked parallelisms occur: "The beginning of "the song of joy and beauty of thy sister beloved of thy heart"; "Come to the meadows my brother beloved of my heart"; "Sister, one of the lilies"; and further on, "The voice of the swallow resounds, it saith the earth is enlightened"; "Let thy hand be in my hand when I go to walk, let me be with thee in every pleasant place"; "Thou lovest me running to seek me." Nearly similar passages occur in the third song, which is also a fragment. The fourth song or hymn is of a very different nature, and is evidently one of the solemn dirges used at festivals during the exhibition of the figures of Osiris, as related by Herodotus. This Hymn is in the text ascribed to King Antuf, a monarch of the XIth Dynasty. The ancient relic is fortunately almost perfect, and the composition is of a high order, as the following extract will testify:—"Put oils upon thy head, clothe thyself with fine linen adorned with precious metals, with the gifts of God. Multiply thy good things, yield to thy desire, fulfil thy desire with thy good things, whilst thou art upon earth, according to the dictation of thy heart. The day will come to thee when one hears not the voice, when the one who is at rest hears not the voices of the mourners . . . yea, behold none who goes thither returns back again."

2. *Nimrod et les Écritures Cunéiformes.* Par Josef Grivel (read in English).—In this essay the author maintained that Merodach, under his Accadian name of "Amarud the eldest son of the Lord of Urhi," was identical with Nimrod "le géant chasseur" of the Septuagint.

Tuesday, May 5, 1874.

S. Birch, LL.D., President, in the Chair.

The following candidates were duly elected Members of the Society:—Miss Eunice Bagster; Horatio Bland; William Boscawen, Jun.; John Dryden; Rev. J. M. Fuller; Rev. Canon Lane; John H. Lydall.

The following papers were then read :—

1. *Synchronous History of Assyria and Judah*, B.C. 745—688. By J. W. Bosanquet, F.R.A.S., Treasurer.—This was a paper in sequence to a previous one by the learned author (*Trans. S. B. A.* II, p. 147), in which he lowered the dates of the Jewish kings by 25 years, a view supported in the present paper by an examination of the published Cuneiform documents, B.C. 745–688; so that the assumed uncorrupted Hebrew text was proved to corroborate this displacement. The grounds upon which Mr. Bosanquet based his argument were as follows: (1) Menahem (reigned in Samaria 10 years) became tributary to Tiglath-Pileser in this king's 8th year (B.C. 738), *Cuneif. Insc.*, though the common reckoning makes Menahem to have died 24 years before (this is rectified by substituting Pekah). (2) Some Assyriologists assert that the Assyrian scribes omitted from 30 to 40 archons, to suit their respective theories. (3) Isaiah makes Sennacherib invest Jerusalem in 14 Hezek. (713 B.C. Old Reckoning); and the Assyrian Canon makes the accession of the former 705 B.C. (rectified by changing 14 to 28 Hezek.). (4) Jotham's reign doubled over Uzziah and Ahaz is rejected by them *in toto* to suit their system. (5) Mr. G. Smith (*Trans. S. B. A.* II, p. 324) allows ten years lower in the death of Pekah (729 v. 739 B.C.); but Mr. Bosanquet believed that 716 was the true date. (6) B.C. 738, New Reckoning, is 49 Azariah, and Sennacherib's third campaign, Jerusalem B.C. 701, or 2 Hezek. (see Chron. ch. 29–32 for coincidences confirmed by Annals of Sennacherib, and five monumental authorities, as well as the Bible, Josephus, Herodotus, &c. (7) Syrian tribute list of 3 Tiglath-Pileser, 8th year's list, where Pekah displaces Menahem in Samaria. (8) Solemn religious rites, B.C. 787–727–667, celebrated every sixty years apart, new Babylonian Cycles or *Kharru;* wherein Mr. Bosanquet investigated the cycle change from Belus B.C. 2286, confirmed by Genesis xi, written 1500 B.C.; and revised 500 B.C. by Ezra and his associates. (9) Assyrian tribute list gives Yuhukazi, formerly supposed to be Ahaz, but shown to be Uzziah = Kazi-yahu. (10) In 718 occurred Pekah's spoliation of Judah; Tiglath-Pileser, Shalmeneser, and Sargon, coeval rulers in 717 (2 Kings xxviii, 16; Isaiah ix, 10; x, 8). (11) The dates occurring upon some old Crimean gravestones indicating that Samaria fell B.C. 705–696 (Smith, 720); Hezekiah became ill B.C. 689 (Smith, 712); former agrees with eclipse as calculated by Sir G. Airy and Mr. Hind from modern astronomical data. Compare the author's "Messiah the Prince," and other writings. This interesting paper was illustrated by six plates.

2. *Revised Translation of the Descent of Ishtar, with a further Commentary.* By H. Fox Talbot, F.R.S., &c.—In this paper the learned Assyriologist showed that the Legend of the Descent of Ishtar was, in its present form, dramatically arranged as a species of Mystery or Miracle Play. The translator was now able to render the whole text more complete by the addition of a fragment of a duplicate copy, containing ten lines, recently found by Mr. Geo. Smith in the British Museum. In an appendix to his revised translation, Mr. Talbot presented the authorities for the various philological alterations introduced, and an exegesis of the more important words and variants in the Assyrian text.

3. *On the Egyptian Altar at Turin.* Drawn by Joseph Bonomi, and described by Samuel Sharpe.—This Altar, or more properly base of an altar, is of dark granite, with four vertical columns, each containing twenty-one lines of finely executed hieroglyphics. At the lower part of the altar is a figure of a priest "beloved by Ptah of Memphis," who is named in the cartouche PEPI, a monarch of the VIth Dynasty. As the name of the monarch has evidently been recut, and the style of art approaches that of the Ptolemaic period, Mr. Bonomi was inclined to believe that the monument was of that later date, The paper was accompanied with three plates, which, with those illustrating Mr. Bosanquet's paper, will appear in the Transactions.

4. *Translation of the Hieroglyphic Inscription upon the Granite Altar at Turin.* By S. Birch, F.S.A., President.—This paper showed that the Altar was probably one of those in the Hephæsteum at Memphis, and that it was interesting as giving the names of the deities then worshipped. The first column (A)

contained the Ark of the God Socharis, and the Coffin of Osiris Tat, and below the name and titles of PEPI, "The Good God Pepi, the giver of life, beloved of Ptah, who is the chief of the southern wall, approved of Sekhet"; in the third compartment stands Thoth of Eshmoun (Hermopolis) with his speech to the gods of the South. The other columns (B and C) contained the names and epithets of the various deities of the West and South; and the fourth (D) a list of the offerings presented to them, in which occur many new words, of which the meanings were given.

Tuesday, June 2, 1874.

S. BIRCH, LL.D., President, in the Chair.

The following candidates were duly elected Members of the Society:—Mrs. Crosbie, Ardfert; Rev. J. M. Dalton, M.A., Marlboro' House; Robert Darbyshire, B.A., F.S.A., F.G.S.; Charles I. Hemans; Miss Margaret Henderson; John Gurney, Norwich; Mrs. Lennox, Sutton; Mrs. C. D. Marston; H. S. Mitchell; John Muir, LL.D., D.C.L., Ph.D., Edinburgh; J. Linton Palmer, M.D., F.S.A.; C. D. Purdon, Belfast; Col. J. Roxburgh.

The following Papers were then read:—

1. *On the Phœnician Inscription "Melitensis Quinta."* By Prof. W. Wright, LL.D.—This paper reviewed the earlier readings of the inscription by the Due de Luynes, Quatremère, Ewald, and Blau; and gave a revised text and translation, based on an examination of the stone itself. It was accompanied by a facsimile of the stone described.

2. *On an Egyptian Calendar of Astronomical Observations of the XXth Dynasty.* By P. Le Page Renouf, F.R.S.L.—This paper was a collation and a correction of the famous Calendar of Star Culminations, which had been published by MM. Champollion and Biot, the latter savant having, however, been misled by believing the document to be astrological only. The text was accompanied by a full exegesis and a diagram of astral positions.

3. *On the Cylindrical Altar of Nechtharhebes at Turin.* By Joseph Bonomi, (with two plates).—This interesting monument, which, although noticed by Orcurti, is now published for the first time, is a large cylindrical altar of black granite, finely wrought, and covered with 68 vertical lines of hieroglyphics, and four vignettes, representing the Pharaoh Nechtharhebes of the XXXth Dynasty making offerings, and uttering adorations to the various deities of the four cardinal points.

4. *Translation of the Hieroglyphic Inscription upon the Granite Altar at Turin.* By Samuel Birch, LL.D., President.—In this paper, the learned Egyptologist gave a literal translation of the hieroglyphic text, which showed it to be a series of Adorations to the Deities of the South, North, West, and East, mentioning the particular cities in which they were worshipped, thus adding some fresh names to the geographical lists of ancient Egypt under the Persian Dynasty.

5. *Assyrian Notes.* By H. Fox Talbot, F.R.S.—(1) *The use of Papyrus among the Ancient Accadians.*—In his recent investigations as to the original meanings of some of the Assyrian roots, Mr. Fox Talbot found that the terms Nazabu Shakani, "the stem of a reed," and Nigris, "a volume," and "writings upon vegetable skin," occur among the Assyrian inscriptions published by the British Museum, thus attesting the accuracy of the statement of Pliny, that the Papyrus was so used by the Babylonians, a fact which, till Mr. Sayce first called attention to it, had been disputed. (2) *Assyrian Books.*—In this paper, the following sentences were adduced to show that the Assyrian literature was not confined solely to inscriptions upon tablets of baked clay: "In the night-time bind around the sick man's head a sentence taken from a good book," (for a

charm); and "care not to save the newly written books," &c. (3) *On the amount of accuracy now sometimes attainable in Assyrian translation.*—This paper was a retrospective summary of what had been done in Assyriology for the last twenty years, showing that the very discrepancies of different translators was an evidence of their general agreement, in proof of which Mr. Talbot gave a translation in parallel columns of an Assyrian Hymn, translated in English by himself, and in French by M. F. Lenormant, which differed only in the most trivial points of idiom.

Tuesday, July 7, 1874.

Sir H. Rawlinson, K.C.B., Vice-President, in the Chair.

The following candidates were duly elected Members of the Society:—George Alexander; John Gurney Barclay; Miss Emily Buxton; Prof. A. H. Charteris (*Edinburgh*); Rev. Bryan Dale, M.A.; Principal Greenwood (*Owens' College*); John Harman; Miss Hollond; Geo. H. Lee; Mrs. John Dendy Pilcher; Dr. Franz Prætorius (*Berlin*); Rev. Dr. Robinson, F.R.S. (*Armagh*); Rev. Alexander Ross, M.A.; Edward Sewell, B.A.; Gregory S. Walters; Buxton Whalley.

The following Paper was then read:—

Account of Recent Excavations and Discoveries made on the site of Nineveh. By George Smith.—Mr. Smith commenced by relating how the subject of Assyrian researches was revived through the action of the "Daily Telegraph," and he then described the site of Nineveh and position of Kouyunjik, where the principal excavations were carried on. Passing on to the collection obtained the lecturer described the inscriptions of Shalmaneser, Tugulti-ninip, and other early kings, and afterwards a curious text of an early Babylonian monarch, which Mr. Smith described as follows:—The name of this new Babylonian monarch was Agu, son of Tassi-gurubar, son of Abi . . . son of Agu-rabi, son of Ummih-zirriti of the race of Suqamuna. The names of all these monarchs are early in style, and totally different to the names common in the known historic period. The titles of the monarch are King of Kassu and Akkad, King of Babylonia, King of Padan, and Alman, King of Guti or Goim, and King of the Four Races. The great exploit of Agu was the recovery of the images of Merodach and Ziratbanit, which had been carried to the land of Hani, a place north-east of Babylonia. This remarkable tablet carries us back to a remote age, earlier than the discovered ruins in Babylonia, and yet Agu relates, in his inscription, that he restored the temple of Bel, at Babylon, which already existed in his time. We must remember that Babylonia had a history and chronology reaching far into the past, and the doubt that now hangs over its early records arises not from any defect in these early inscriptions but from our ignorance respecting them. The lecturer then pointed out the peculiarities of an Assyrian lintel, ornamented with two winged dragons and a centre vase; referring again to the inscriptions, those from the palace of Sennacherib were next mentioned, and a selection described. He next proceeded to notice a fragment of the Synchronous History of Assyria and Babylonia, translations of which have already appeared in the Transactions of the Society, so a short description of it sufficed. The copy in the Museum was discovered and published some years ago by Sir Henry Rawlinson; it describes the wars, treaties, and other transactions between the kingdoms of Babylonia and Assyria during several centuries, and is a most important document in relation to the history of those countries. In spite of some smaller fragments which have since been found, there still remained some parts of the history which were wanting. One of these parts lay between the time of Bel-nirari, B.C. 1370, and Bel-kudur-uzur, B.C. 1250. It was well known that within this period occurred the conquest of Babylonia by Tugulti-ninip king of Assyria, an event which marked one of the great epochs in the history of the country. One of the fragments from the palace of Sennacherib is the upper corner of the second column of the synchronous

tablet, with the account of this conquest. All the lines of the new fragments are mutilated, but the most important parts are preserved, and some of the lost parts can be restored. An account of this fragment appeared in the "Athenæum"; since then it has been cleaned, and some of the words come out clearer. The King of Babylon at this time bore the name Nazi-murudas; he was of the race of monarchs called Arabian by Berosus; he engaged in war with Tugulti-ninip king of Assyria, and was defeated at a city in northern Babylonia named Kar-istar-agarsal; after this the Babylonians submitted to Tugulti-ninip, who established a Semitic race of kings at Babylon. The new empire of Tugulti-ninip is said to have reached from the city of Pilazki to a place the name of which is lost, and from Arman-agarsal on the Tigris, to Kullar in the land of Zamua (the Persian Mountains). There is a fragment of the next reign which appears to state that the son of Bel-kudur-uzur king of Assyria was king at Babylon. This monarch killed his father in battle, and twice invaded Assyria. The reverse of the new fragment of synchronous history contains the end of the account of the expedition of Shalmaneser II. to Babylon, and shows that this document also contained the record of the Babylonian wars of his son Samsi-vul III. Mr. Smith next referred to some fragments relating to the history of Egypt and Assyria in the 8th and 7th centuries before the Christian era. The oldest of these he had already noticed in the "Daily Telegraph": it relates to the revolt stirred up by Pharaoh king of Egypt in Philistia, Judah, Edom, and Moab, B.C. 711, which revolt was suppressed by Sargon king of Assyria. In an earlier part of his annals Sargon mentions an Egyptian ruler named Sibahe, who has been hitherto supposed to be the Sabaco of Herodotus, but on one of the new fragments we have the Egyptian royal name Sabaku, the exact equivalent of Sabaco. The annals of Assur-bani-pal relate that on the death of Tirhakah, he was succeeded by Urdamane, who is called the son of his sister. Two of the new copies give us the variant statement, that Urdamane was son of Sabaku. This enables us to fix, in conjunction with the Egyptian inscriptions, the following succession and relationship of the Ethiopian kings of Egypt:—*Sabaku*, the Sabaco of Herodotus. *Sabatuk*, his successor, of whom no particulars are known. Tarqu, or Tirhakah, brother of the wife of Sabaku. Urdamane, son of Sabaku, and the sister of Tarqu. The following new facts in the history of Tirhakah and Urdamane are from fragments of tablets and cylinders in the new collection. During the reign of Esarhaddon, Tirhakah king of Ethiopia led Bahal king of Tyre to throw off the Assyrian yoke, and form an alliance with himself. To punish this rebellion, Esarhaddon marched against Palestine, and laid siege to Tyre, in his tenth expedition, about the year 672 before Christ. Leaving part of his army before Tyre, he marched from Aphek in Lebanon, along the coast of Palestine to Raphia, in the south-west corner of Palestine. Esarhaddon tells us that between Aphik and Raphia was a distance of 30 kaspu, that is about 200 miles. Here the assistance of the King of Arabia was secured to convey water for the army, as the boundary river of Egypt was dry. The Assyrian monarch describes the distances marched by his army, the nature of the country, and the suffering of his soldiers by thirst. The object of the expedition of Esarhaddon was Miluhha or Miruhha, probably Meroe, the stronghold of Tirhakah. The mutilation of the record prevents us ascertaining if he reached it; but we know from other sources that he conquered Egypt up to Thebes, and annexed it to Assyria. From this time there was war between the Assyrians and Tirhakah for the possession of Egypt, until the latter fled before the forces of Assur-bani-pal, left the country, and died. Tirhakah was succeeded in Ethiopia by his nephew Urdamane, who appears to correspond with the Nud-mi-ammon of the Egyptian texts. Urdamane continued the war with Assyria, and took and fortified the cities of Niha (Thebes), the No of the Bible, and Unu (Heliopolis), the On of the Bible. The Assyrians then with their adherents collected in Memphis, which city was besieged and captured by Urdamane. In the next expedition by Assur-bani-pal to recover Egypt from Urdamane, we gain some new details, including the weight of the two obelisks which the monarch removed from Thebes as trophies to Nineveh. There is also in the new collection a perfect copy of the account of Gyges, King of Lydia, and Psammitichus of Egypt. Next came a notice of some additions to the curious myths current in Assyria. The Assyrians

believed that all natural phenomena were the work of spirits, and diseases misfortunes, and calamities were caused by evil spirits, of whom they counted several classes. In the Assyrian system it was the especial work of the god Hea and his son Merodach to check and reverse the work of these demons. The history of the Seven Evil Spirits is written on a large clay tablet, part of which is in the old Museum Collection; another considerable portion has now turned up in Sennacherib's palace. The story of these evil spirits is as follows:—In the first days there existed evil gods and rebellious spirits in the lower regions of heaven, and they were the authors of misfortune. There were seven of these spirits, who were the messengers of the vengeance of Anu, the supreme god of heaven, the third one was in the shape of a leopard, the seventh one was the maker of the tempest; all the others had distinguishing characteristics, but the list is mutilated. These seven spirits were let loose on the earth; they went from city to city, holding the wind and travelling on the tempest, causing darkness on a clear day; they had with them the tempest of Vul, god of the atmosphere; they came in the west like lightning, and went down to trouble the rivers. In all the heaven of Anu the king they set up evil, and there was none to resist them. At that time the god Bel heard of their doings and weighed the matter in his mind. He took council over these things with Hea, who was the great sage among the gods. Considering that Anu did not govern heaven, which was his division of the universe, properly, and did not keep the wicked spirits in order, Bel, who ruled the earth, and Hea, who ruled the sea, resolved on intervention, and they placed Sin, the moon-god, Shamas, the sun-god, and Ishtar or Venus, three children of Bel, in the lower part of heaven to rule it, and they established them with Anu in the government of the whole of the celestial regions, and Bel supported them day and night, and urged them to be united. When the seven evil spirits in their wanderings came to the lower regions of heaven and saw the new rulers, they came fiercely round the moon-god to attack him, and the noble Shamas, brother of the moon, and Vul, the god of the atmosphere, son of Anu, they persuaded to come over to their side, while Ishtar, sister of the moon-god, joined king Anu, sat with him on his throne, and shared his empire. Sin, the moon-god, was now abandoned and hardly pressed by his enemies; while meditating new mischief, the seven evil messengers of Anu, uncontrolled by the moon, swept down from the midst of heaven to earth. Bel, seeing the trouble of his son Sin, called to himself his attendant god, Nusku, and directed him to go to Hea, who dwelt in the deep, and inform him of the trouble that had happened to Sin. Nusku departed, and arriving at the sea, told the message of his lord to Hea. Hea on hearing of the breakdown of his plans, was very angry, and calling to him his son Merodach, described to him the conduct of the seven spirits who came like a tempest on the world and fought against Sin, the son of Bel, and he directed him to go to his assistance. The rest of this curious myth has not yet been discovered, but there is sufficient to show the character of the story. Descriptions of various other tablets and objects followed, and Mr. Smith concluded in the following words:—"My explorations in the East have now closed, and the subject of Assyrian excavations will probably again slumber for some time; but as the public take a wider interest in these studies, and in the remarkable monuments which abound in the Valley of the Euphrates and Tigris, I hope that at a future day excavations may be reopened, and some of the objects I have in view may then be accomplished."

A short discussion ensued, and the thanks of the Meeting were voted by acclamation to the industrious Explorer and Assyriologist.

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